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GLOSSARY OF AVIATION TERMS

TERMES D'AVIATION

**ENGLISH-FRENCH
ILLUSTRATED**

**FRANCAIS-ANGLAIS
ILLUSTRÉ**

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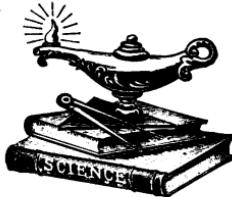
LIEUT. VICTOR W. PAGÉ, A.S.S.C., U.S.R.

AND

LIEUT. PAUL MONTARIOL, FRENCH FLYING CORPS

Assigned to
INSTRUCTION DEPARTMENT
SIGNAL CORPS AVIATION SCHOOL
MINEOLA, LONG ISLAND

LISTS OF AVIATION TERMS IN GENERAL USE GIVEN
IN FRENCH WITH ENGLISH EQUIVALENTS AND IN
ENGLISH WITH CORRESPONDING FRENCH WORDS



**A VALUABLE REFERENCE FOR ALL ENGAGED IN THE
ALLIED AVIATION SERVICE**

1917

CHARLES S. PRATT

New and Old Books, Stationery, Blank Books

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HAZELHURST FIELD

MINEOLA, L. I.

PREFACE

As there are numerous young men training in this country, both in ground schools and at flying fields for the aviation service, and as much of this will probably be performed in France, it seems desirable to compile a brief glossary of commonly used aviation terms in both French and English to facilitate intercourse between the pilots and mechanics speaking different languages who work together in the present emergency.

These lists are enlarged from a briefer series prepared originally for use in teaching classes at the Signal Corps Aviation School, Mineola, L. I. The illustrations accompanying the text should make everything clear about which any doubt could exist. As no definitions are given, the booklet is more in the nature of a glossary or list of words than a dictionary, and is intended only for use of those already familiar with aviation. Some of the equivalents may not be literally correct, but are selected with a view to listing only terms in common, everyday usage.

The painstaking work of Lieut. Paul Montariol, of the French Flying Corps, assigned as instruction officer at Mineola, L. I., has been of great value in furnishing French equivalents and insures that these will conform to the accepted practice abroad. It is believed that this

compilation will be of some value in securing closer co-operation and more intelligent discussion of aviation subjects between members of our oversea aviation forces and our non-English speaking allies.

VICTOR W. PAGE,

1st Lieut. A. S. S. C., U. S. R.

October, 1917.

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GLOSSARY OF
AVIATION TERMS

ENGLISH—FRENCH

GLOSSARY OF AVIATION TERMS

ENGLISH—FRENCH

<u>FLYING FIELD TERMS</u>	<u>TERMES EMPLOYÉS SUR L'AERODROME</u>
AIRMAN	AVIATEUR
ADJUSTMENT	RÉGLAGE D'UN AP- PAREIL
AIRPLANE	AEROPLANE, AVION
AIRSHIP	AERONAT
ALTIMETER	ALTIMÈTRE
ALTITUDE	ALTITUDE
ANGLE OF INCIDENCE	ANGLE D'INCIDENCE
ANGLE OF ATTACK	ANGLE D'ATTAQUE
APPARATUS	APPAREIL, ENGIN
AVIATOR	AVIATEUR
BALANCE	ÉQUILIBRE
BALLOON	BALLON
BAROGRAPH	BAROGRAPHE
BASKET	NACELLE
BREAKDOWN	PANNE
BUS (Comm. for Plane)	COUCOU, ZINC, TAXI (Vulg.)

<u>FLYING FIELD TERMS</u>	<u>TERMES EMPLOYÉS SUR L'AÉRODROME</u>
CAMBER	COURBURE
CANVAS HANGAR	HANGAR DE TOILE, (Vulg. DESSONNEAU)
CARROUSEL (Involuntary sharp turns on ground)	CHEVAL DE BOIS (Tournants involontaires au sol)
CENTER OF GRAVITY	CENTRE DE GRAVITÉ
CENTER OF PRESSURE	CENTRE DE PRESSION
CENTER OF THRUST	CENTRE DE POUSSEÉ
CHOCK	CALE
COMPASS	BOUSSOLE
CRABBING	MARCHER EN CRABE
DEAD LEAF (Falling like a)	FEUILLE-MORTE (Descendre en)
DIHEDRAL	DIÈDRE
DIVE (TO)	PIQUER
DRAG	RÉSISTANCE À L'AVANCEMENT
DRIFT	DÉRIVER, DÉPORTER, DÉRIVE
DUAL CONTROL	DOUBLE COMMANDE
ENGINE	MOTEUR
FACTOR OF SAFETY	COÉFFICIENT DE SÉCURITÉ
FLARE (Guide for landing)	FEU D'ATTERRISSAGE

<u>FLYING FIELD TERMS</u>	<u>TERMES EMPLOYÉS SUR L'AERODROME</u>
FUR LINED BOOTS	CHAUSSONS FOURRÉS
FUR LINED GLOVES	GANTS FOURRÉS
GAP	ESPACE ENTRE LES PLANS
GLIDE	PLANER
GOGGLES	LUNETTES
GRASS CUTTING (Fly- ing close to the ground)	RASE MOTTES (Vol au ras du sol)
HANGAR	HANGAR
HEIGHT INDICATOR	ALTIMÈTRE
HELMET	CASQUE
HYDROAIRPLANE	HYDROAEROPLANE
INCIDENCE	INCIDENCE
LAND (To)	ATTERRIR
LANDING	ATTERRISSAGE
LANDING GROUND	TERRAIN D'ATTERRIS- SAGE
LANDING ON NOSE & REMAINING TAIL HIGH	SE METTRE EN PY- LONE
LANDING SHEET (Cloth marker)	DRAP D'ATTERRIS- SAGE
LIFT*	FORCE ASCENSION- NELLE
LINE OF FLIGHT	LIGNE DE VOL

<u>FLYING FIELD TERMS</u>	<u>TERMES EMPLOYÉS SUR L'AERODROME</u>
LOGGY, SLUGGISH LOOPING THE LOOP	MOU, TANGENT LOOPING, BOUCLER LA BOUCLE
MAP	CARTE
MOTIVE POWER	FORCE MOTRICE
NOSING UP NOSING DOWN NOSE HEAVY NOSE SPIN	MONTER DESCENDRE, PIQUER LOURD DU NEZ VRILLE SUR LE NEZ
OBSERVER ORIENTATION	OBSERVATEUR ORIENTATION
PANCAKE (Landing)	PERTE DE VITESSE (Atterrissage)
PLANE	AVION
BATTLING PLANE RECONNOITERING PLANE	AVION DE CHASSE AVION DE RECONNAIS- SANCE
BOMBARDING PLANE PILOT	AVION DE BOMBARDEMENT PILOTE
PROPELLER PITCH PROPELLER WASH PUSHER	PAS DE L'HÉLICE SOUFFLE DE L'HÉLICE AVION MU PAR HÉ- LICE PROPULSIVE
REVOLUTIONS (R.P.M.)	TOURS (À LA MINUTE)

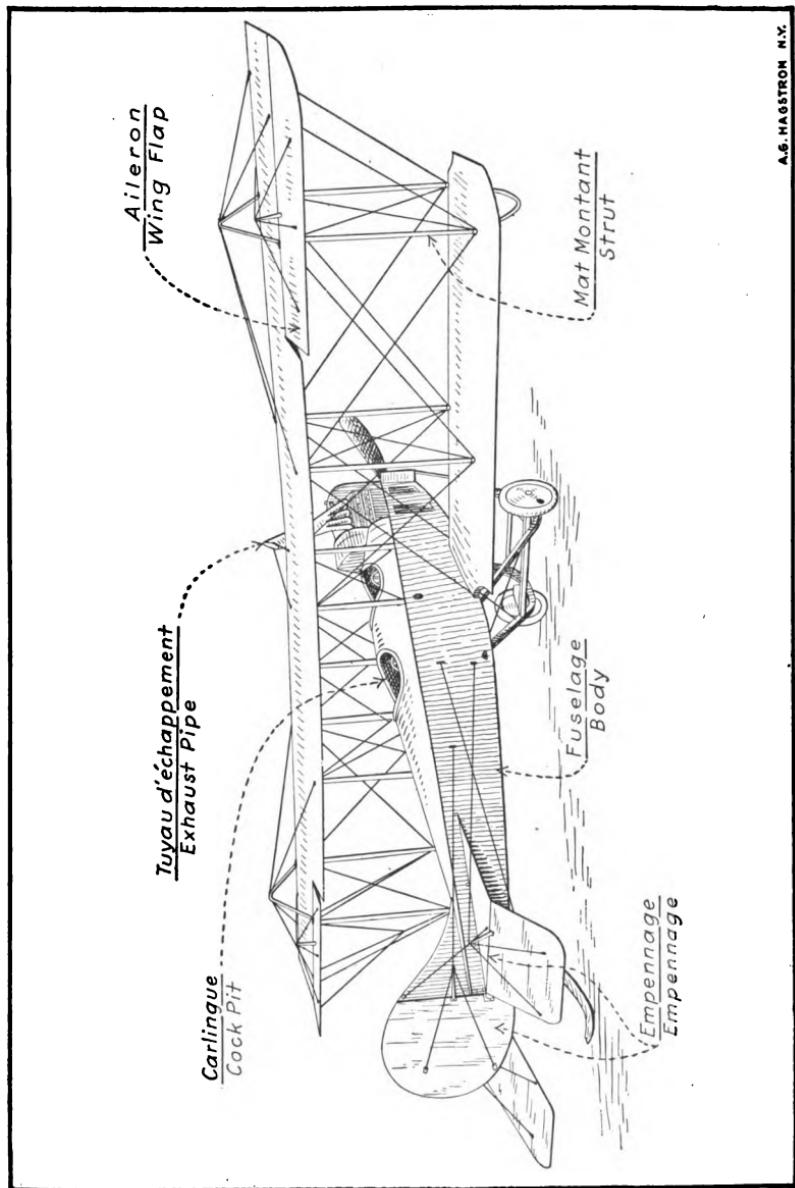


Fig. 1.—AIRPLANE VIEWED FROM REAR SHOWING IMPORTANT CONTROL ELEMENTS
AVION VUE ARRIÈRE MONTRANT LES PRINCIPALES COMMANDES

<u>FLYING FIELD TERMS</u>	<u>TERMES EMPLOYÉS SUR L'AÉRODROME</u>
ROCKING	REMOUS
SIDE SLIP	GLISSADE SUR L'AILE
SLOW SPEED	RALENTIR
SLUGGISH	TANGENT, MOU
SOMERSAULT (To)	CAPOTER
SPEED INDICATOR	INDICATEUR DE VITESSE
SQUADRON	ESCADRILLE
STAGGERED WINGS	PLANS DÉCALES
STALL	PERTE DE VITESSE (en l'air)
STUNTS	ACROBATIES
TAIL DIVE	GLISSADE SUR LA QUEUE
TAIL SPIN	VRILLE
TO BANK	INCLINER, PENCHER
TO DIVE	PIQUER
TO DRIFT	DÉRIVER
TO FLY OVER	SURVOLER
TO LEAVE THE GROUND	DÉCOLLER
TO START ENGINE	METTRE EN MARCHE
TO SWITCH OFF	COUPER LE CONTACT
TO SWITCH ON	METTRE LE CONTACT
TO TILT	INCLINER, PENCHER
TO TAXI	ROULER AU MOTEUR

<u>FLYING FIELD TERMS</u>	<u>TERMES EMPLOYÉS SUR L'AERODROME</u>
TRACTOR	AVION MU PAR HÉ- LICE TRACTIVE
TURNING	TOURNANT, VIRAGE
TURN OVER ON THE WING	RENVERSEMENT (SUR L'AILE)
UNION SUIT	COMBINAISON
VEERING	VIRAGE
WASH IN, WASH OUT	RÉGLAGE DE L'INCI- DENCE
WIND CONE	MANCHE À VENT
WINDWAY	DÉRIVE
WING SPAN	ENVERGURE
WING WARPING	GAUCHISSEMENT
ZUHMING, ZOOMING	MONTER EN CHAN- DELLE
<u>THE PLANE</u>	<u>L'AVION</u>
AXLE	ESSIEU
BAROGRAPH	BAROGRAPHE
BIPLANE	BIPLAN
BLADE (PROPELLER)	PALE
BODY	FUSELAGE

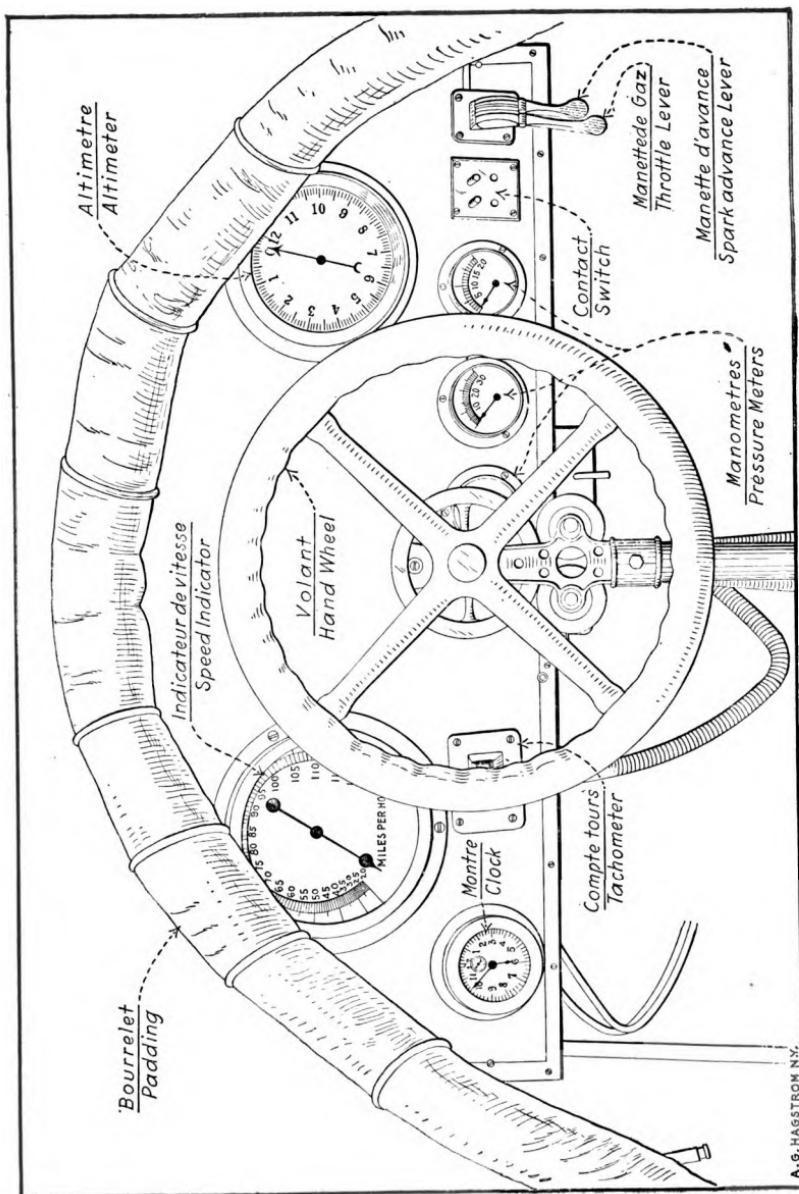


FIG. 2.—MEASURING, INDICATING AND CONTROL ELEMENTS OF AIRPLANE
COMMANDES ET INSTRUMENTS DE BORD D'UN AVION.

A. G. HAGSTROM NY.

<u>THE PLANE</u>	<u>L'AVION</u>
BOLT	BOULON
BRACING STRUT	JAMBE DE FORCE
BRACING TUBE	TIRANT
BRACING WIRES	CROISILLONS
BRONZE BEARING OF AXLE GUIDE	PATIN DE GLISSIÈRE
CABANE	CABANE
CABLE	CABLE
CELLULE	CELLULE
CENTRAL PANEL	PLAN CENTRAL
CLOTH WINDING	MAROUFLAGE
COCKPIT	CARLINGUE
COMPASS	BOUSSOLE
CONTROL BRIDGE	COMMANDES À PONT
CONTROL ELEMENTS	COMMANDES
CONTROL STICK	MANCHE À BALAI
CORD WINDING	TRANSFIL
COVER	HOUSSE
CUSHION	COUSSIN
DIHEDRAL	DIÈDRE
DOPE	ENDUIT
ELEVATOR	STABILISATEUR (Gouvernail de Profondeur)
ENGINE BED	BERCEAU DU MOTEUR
ENGINE SPIDER SUPPORT	ARaignée SUPPORT DE MOTEUR

<u>THE PLANE</u>	<u>L'AVION</u>
FAIR	PROFIL
FAIRING	FUSELÉ, PROFILE
FASTENING	ATTACHES
FIN (TAIL)	DÉRIVE (PLAN)
FITTINGS	FERRURES, GOSETS
FLEXIBLE SHAFT	TRANSMISSION FLEXIBLE
FLIPPERS	VOLETS DE PROFONDEUR, STABILISATEUR
FLOORING	PLANCHER
FOOT LEVER	PALONNIER
FRAME	CHASSIS
FUSIFORM FRAME	FUSELAGE
GLASS GAUGE	TUBE DE NIVEAU
GRAVITY TANK	RESERVOIR EN CHARGE
GUIDE	GLISSIÈRE
HANDLE	POIGNÉE
HINGE	CHARNIÈRE
HOLLOW WOOD	BOIS CREUX
HOOD	CAPOT
HORN	GUIGNOL
HUB	MOYEU
JOY STICK	MANCHE À BALAI
KNUCKLE	CHARNIÈRE

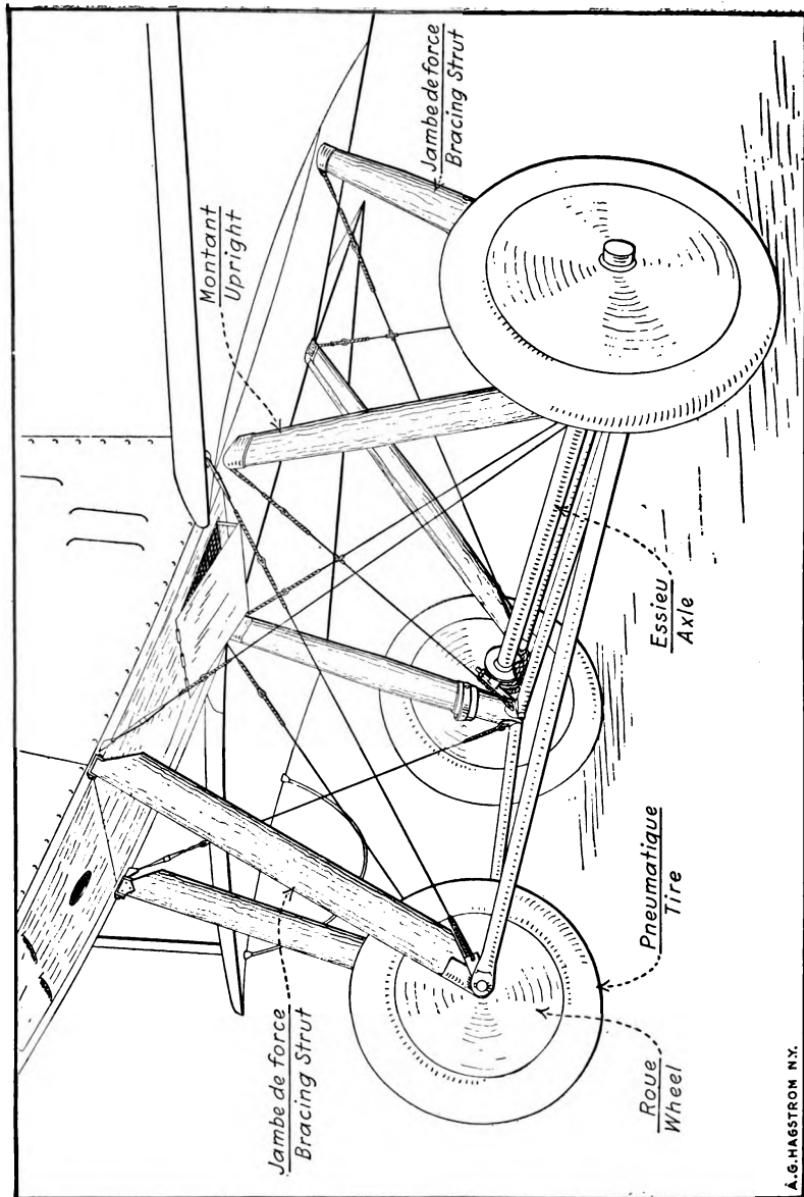


FIG. 3.—AIRPLANE LANDING GEAR OF THREE-WHEEL TYPE SHOWING MAIN COMPONENTS
TRAIN D'ATERRISAGE À TROIS ROUES

A. G. HAGSTROM N.Y.

<u>THE PLANE</u>	<u>L'AVION</u>
LAMINATED WOOD	CONTREPLAQUÉ (BOIS)
LANDING GEAR	TRAIN D'ATTERRIS- SAGE
LEADING EDGE	BORD D'ATTAQUE
LINEN	ARÉTIER AVANT
LONGERON	TOILE
LONGITUDINAL BAR	LONGERON
LOUVRES	PERSIENNES
MAP HOLDER	PORTE-CARTES
MONOPLANE	MONOPLAN
NUT	ECROU
PADDING	BOURRELET
PANEL (CENTRAL)	PLAN CENTRAL
PEDAL	PÉDALE
PIANO WIRE	CORDE À PIANO
PRESSURE PUMP	POMPE À PRESSION
PRESSURE TANK	RÉSERVOIR SOUS PRESSION
PROPELLER	HÉLICE
PROPELLER FLANGE	FLASQUE D'HÉLICE
PULLEY	POULIE
RIM	JANTE
ROPE	CORDE
RUDDER	GOUVERNAIL

THE PLANE

RUDDER BAR
RUNNER

SAFETY BELT
SAFETY WIRES
SCREW
SEAT
SHAFT (FLEXIBLE)

SHEETING
SHOCK ABSORBER

SIDE PANEL
SINGLE SEATER
SKID
SPOKES
STABILITY PLANES
STABILIZER
STABILIZING FIN
STEERING WHEEL
STIRRUP
STRUT
SUPPORTING CASTING

TACHOMETER
TAIL
TAIL FIN
TAIL SKID
TANK

L'AVION

PALONNIER
PATIN, PATINNAGE

CEINTURE DE SURETÉ
FREIN DE SURETÉ
HÉLICE
SIÈGE
TRANSMISSION FLEXIBLE (Vulg. BOWDEN)

BLINDAGE
EXTENSEUR (Vulg. SANDOW)

PANNEAU
MONOPLACE
PATIN, PATINNAGE
RAYONS
EMPENNAGE
PLAN FIXE DE QUEUE
PLAN DE DÉRIVE
VOLANT
ÉTRIER
MAT, MONTANT
PIED

COMPTE TOURS
QUEUE
PLAN DE DÉRIVE
BÉQUILLE
RÉSERVOIR

THE PLANE

THIMBLE
THREE SEATERS
THROTTLE
TILTING WINGS
TIRE
TRACTOR SCREW
TRAILING EDGE

TRIPLANE
TUBE
TURN BUCKLE
TURRET
TWO-SEATER

VARNISH

WHEEL
WIND SHIELD
WING
WING COVERING
WING RIBS
WING SPAN
WING SPAR
WING SUPPORT
WIRE STAY

THE ENGINE

ADJUSTING NUT

L'AVION

COSSE
TRIPLACE
MANETTE
AILERONS
PNEU, PNEUMATIQUE
HÉLICE TRACTIVE
ARÉTIER ARRIÈRE,
BORD DE SORTIE
TRIPLAN
TUBE
TENDEUR
TOURELLE
BIPLACE

VERNIS

ROUE
PARE BRISE
AILE, PLAN
ENTOILAGE
NERVURES
ENVERGURE
BRAS D'AILE
ATTACHES D'AILES
TENDEUR

LE MOTEUR

MOLETTE

<u>THE ENGINE</u>	<u>LE MOTEUR</u>
ADVANCE SPARKING	AVANCE A L'ALLUMAGE
AIR FEEDER	MANCHE A AIR
AXLE	AXE
BABBITT METAL	ANTIFRICTION
BALL BEARING	ROULEMENT A BILLES
BASE BEARING	PALIER
BATTERY	PILE
BEARING BOX	COUSSINET
BEVEL GEAR	PIGNON CONIQUE, PIGNON D'ANGLE
BOLT	BOULON
BRAKE	FREIN
BREAKDOWN	PANNE
BREATHER PIPE	RENIFLARD
CAM	CAME
CAM ROLLER	GALET
CAMSHAFT	ARBRES A CAMES
CARBURETOR	CARBURATEUR
CELL	BATTERIE
CHAIN	CHAINE
CLUTCH	EMBRAYAGE
COG	PIGNON
COIL	BOBINE
COIL SPRING	RESSORT A BOUDIN

<u>THE ENGINE</u>	<u>LE MOTEUR</u>
COIL VIBRATOR	TREMBLEUR
COMBUSTION CHAM- BER	CHAMBRE DE COM- PRESSION
COMPENSATOR	COMPENSATEUR
CONTACT BREAKER	DISPOSITIF DE RUP- TURE
CONNECTING ROD	BIELLE
CORE HOLE PLUG	BOUCHON DE DESSA- BLAGE
COUNTERSHAFT	ARBRE SECONDAIRE
CRANK	MANIVELLE
CRANK CASE	CARTER
CRANKSHAFT	VILBREQUIN
CRANK SHAFT JOUR- NAL	SOIE DU VILBREQUIN
CRANK THROW	COUDE DE VILBRE- QUIN
CYLINDER	CYLINDRE
CYLINDER HEAD	CULASSE
DISTRIBUTOR	DISTRIBUTEUR
DRAIN PLUG	BOUCHON DE VIDANGE
DRY BATTERY	PILE SÈCHE
ENGINE	MOTEUR
ENGINE BED	BERCEAU DE MOTEUR
ENGINE SUPPORT	ARAIÑÉE SUPPORT
SPIDER	DE MOTEUR
EXHAUST	ÉCHAPPEMENT

<u>THE ENGINE</u>	<u>LE MOTEUR</u>
EXHAUST MANIFOLD	COLLECTEUR D'ÉCHAPPEMENT
EXHAUST PIPE	TUYAU D'ÉCHAPPE- MENT
EXHAUST VALVE	SOUAPE D'ÉCHAPPE- MENT
FEEDING	ALIMENTATION
FEED PUMP	POMPE D'ALIMENTA- TION
FLOAT	FLOTTEUR
FLOAT CHAMBER	NIVEAU CONSTANT
FLYWHEEL	VOLANT
FUEL PIPE	ARRIVÉE D'ESSENCE
FULCRUM	AXE, OU POINT D'AP- PUI D'UN LEVIER
GEARS, GEARING	ENGRENNAGE
GEAR CASE	CARTER
GOVERNOR	REGULATEUR
GREASE CUP	GRAISSEUR
GRIND (To)	RODER
GROUND WIRE	FIL DE MASSE
HOSE	BOYAU (Caoutchouc)
HORSE POWER	CHEVAL VAPEUR (H.P.)
IGNITION	ALLUMAGE

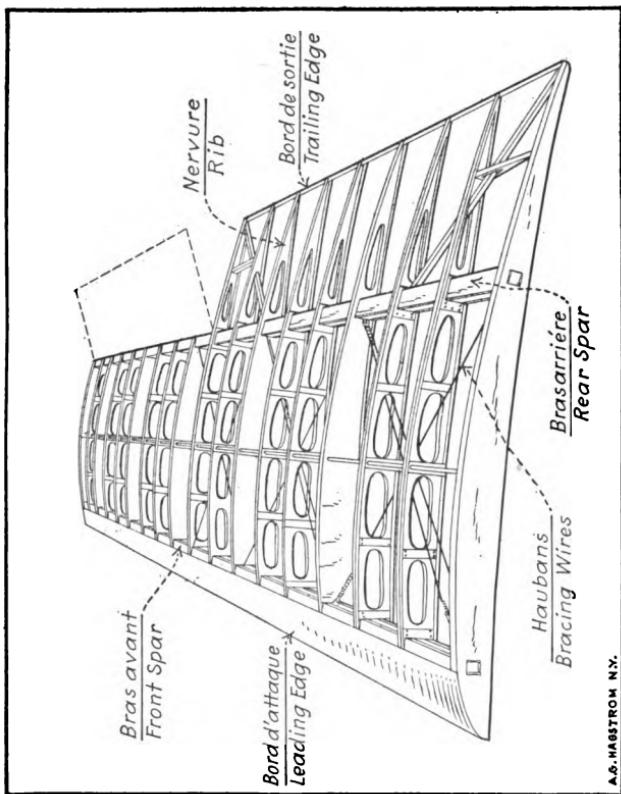


FIG. 4.—SKELETON STRUCTURE OF AIRPLANE WING
SQUELETTE D'UNE AILE D'AVION

A.B. HAMILTON N.Y.

<u>THE ENGINE</u>	<u>LE MOTEUR</u>
INDIA-RUBBER PIPE (gasoline hose)	DURIT
INJECTOR, SPRAY NOZZLE	GICLEUR
INLET	ADMISSION
INLET PIPE	TUYAU D'ARRIVÉE
INLET VALVE	SOUAPE D'ADMIS- SION
KNOCKING	COGNER
LATE EXHAUST VALVE TIME	RETARD A L'ÉCHAP- PEMENT
LEAF SPRING	RESSORT A LAMES
MAGNET	AIMANT
MAGNETO	MAGNETO
MISHAP	PANNE
MISSING	RATÉ
NEEDLE VALVE	POINTEAU
NUT	ÉCROU
OIL CUP	GRAISSEUR
OIL GROOVES	PATTES D'ARAI- GNÉES, GOUTTIÈRES
PACKING	JOINT
PETCOCK	ROBINET DE DÉCOM- PRESSION

THE ENGINE

PINION
PIPE
PISTON RING
PLATINUM TIPPED
SCREW
PRESSURE
PRESSURE METER
PRIMARY
PUMP

RADIATOR
REDUCTION GEARING
REGULATING SCREW
ROCKER
ROTARY

SAFETY GAP
SCREW
SEGMENT
SHAFT
SPARK PLUG
SPARK PLUG WIRE
SPEED OF ROTATION
SPLIT PIN
SPRING
STORAGE BATTERY
SUCTION

TANK

LE MOTEUR

PIGNON
TUYAU
SEGMENT
VIS PLATINÉE
PRESSION
MANOMÈTRE
PRIMAIRE
POMPE

RADIATEUR
DÉMULTIPLICATEUR
VIS DE RÉGLAGE
CULBUTEUR
ROTATIF

PARAFoudRE
VIS
SEGMENT
ARBRE
BOUGIE
FIL DE BOUGIE
RÉGIME
GOUPILLE FENDUE
RESSORT
ACCUMULATEUR
ASPIRATION

RÉSERVOIR

THE ENGINE

TAPE
 THROTTLE DISK
 THRUST BEARING
 (Ball)
 TOGGLE
 VALVE
 VALVE GUIDE
 VALVE SEAT
 VALVE STEM
 VENTURI TUBE

WATER JACKET
 WIRE CONDUIT

TOOLS AND SHOP
 TERMS

ACID
 ADJUSTABLE
 WRENCH
 ALCOHOL
 ALLOY
 ALUMINUM
 AMPERE
 ANGLE IRON
 ANVIL
 ARMATURE

LE MOTEUR

CHATERTUN
 VOLET DE CARBURA-
 TEUR
 BUTÉE À BILLES
 CABILLOT
 SOUPAPE
 GUIDE DE SOUPAPE
 SIÈGE DE SOUPAPE
 TIGE DE SOUPAPE
 DIFFUSEUR

CHEMISE D'EAU
 CONDUIT DE FILS,
 CLARINETTE

OUTILLAGE ET TERMES
 D'ATELIER

ACIDE
 CLEF ANGLAISE
 ALCOOL
 ALLIAGE
 ALUMINIUM
 AMPÈRE
 CORNIÈRE
 ENCLUME
 ARMATURE

<u>TOOLS AND SHOP TERMS</u>	<u>OUTILLAGE ET TERMES D'ATELIER</u>
ASBESTOS	AMIANTE
AUTOGENOUS WELDING	SOUUDURE AUTOGÈNE
AXLE END	TOURILLON
BABBITT METAL	ANTIFRICTION
BAG	SAC
BATH	BAIN
BEVEL	BISEAU
BIT	MÈCHE
BLADE	LAME
BLOW TORCH	LAMPE À SCUDER, CHALUMEAU
BOILER	CHAUDIÈRE
BOLT	BOULON
BORE	ALÉSAGE
BRAZING	BRASURE
BREAK (TO)	CASSER, BRISER
BRONZE	BRONZE
CAN	BIDON
CAPE CHISEL	BURIN
CAST IRON	FONTE
CAST STEEL	ACIER FONDU
CASTOR OIL	HUILE DE RICIN
CHAMOIS SKIN	PEAU DE CHAMOIS
CHISEL	CISEAU À FROID
COAL	CHARBON
COCK	ROBINET

<u>TOOLS AND SHOP TERMS</u>	<u>OUTILLAGE ET TERMES D'ATELIER</u>
COMPASSES	COMPAS
COPPER	CUIVRE
COPPER WIRE	FIL DE CUIVRE
COVER	HOUSSE, COUVERCLE
CORK	BOUCHON
CRACK	FENTE
CROW BAR	PINCE, LEVIER
CUTTING PLIERS	PINCE COUPANTE
DEGREE	DEGRÉ
EBONITE	ÉBONIT
ELECTRIC WIRE	FIL ÉLECTRIQUE
EMERY CLOTH	TOILE ÉMERI
EMPTYING	VIDANGE
FAT	GRAISSE
FILE	LIME
FLANGE	BRIDE
FLAT PLIERS	PINCE PLATE
FUNNEL	ENTONNOIR
GALVANIZED	GALVANISÉ
GASOLINE	ESSENCE
GAUGE	JAUGE
GREASE	GRAISSE
GROOVE	GORGE
GIMLET	VRILLE

<u>TOOLS AND SHOP TERMS</u>	<u>OUTILLAGE ET TERMES D'ATELIER</u>
HAMMER	MARTEAU
HAND DRILL	FORET
HANDLE	POIGNÉE
INSULATOR	ISOLANT
IRON	FER
IRON MOUNTING	FERRURE
IRON WIRE	FIL DE FER
JACK	CRIC
JACK SCREW	VÉRIN
JOINT	RACCORD
KEROSENE	PÉTROLE (Lampant)
KEY	CLAVETTE
KNOT	NŒUD
LAG SCREW	TIREFONDS
LATH	TOUR
LEAD	PLOMB
LEAKAGE	FUITE
LEVER	LEVIER
LINK	MAILLON
LINK MOTION	COULISSE
MANDREL	MANDRIN
MICA	MICA
MINERAL OIL	HUILE MINÉRALE

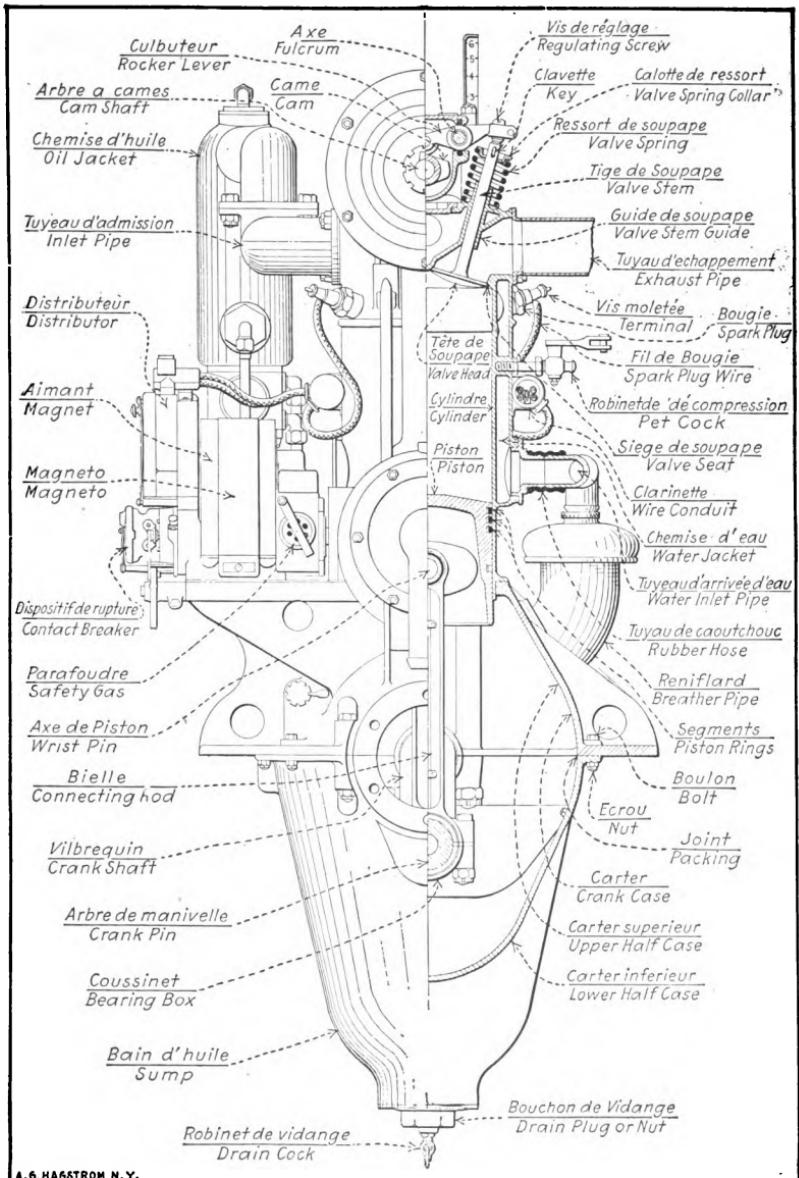


FIG. 5.—PART SECTIONAL END VIEW OF HALL-SCOTT AIRPLANE ENGINE
SHOWING IMPORTANT PARTS
MOTEUR D'AVION HALL-SCOTT DEMIE COUPE, MONTRANT LES PARTIES
IMPORTANTES

<u>TOOLS AND SHOP TERMS</u>	<u>OUTILLAGE ET TERMES D'ATELIER</u>
NAIL	CLOU
NICKEL	NICKEL
NOTCH	CRAN
NUT	ÉCROU
OIL	HUILE
OIL CAN	BURETTE
OIL STONE	PIERRE À AFFUTER
OPENING	ORIFICE, OUVERTURE
PACKING	JOINT
PARRAFIN	PARAFINE
PETROL	ESSENCE
PIN	GOUPILLE
PINNED AND BRAZED	RACCORD GOUPILLE
JOINT	ET BRASÉ
PIPE	TUYAU
PIPING	TUYAUTERIE
PISTON STROKE	COURSE DU PISTON
PLATINUM	PLATINE
PLUG	BOUCHON
PRESSED STEEL	TÔLE EMBOUTIE
PUMICE STONE	PIERRE PONCE
PUMP	POMPE
RASP	RAPE
REINFORCEMENT	FOURRURE
SLEEVE	
RING	BAGUE, ANNEAU

<u>TOOLS AND SHOP TERMS</u>	<u>OUTILLAGE ET TERMES D'ATELIER</u>
ROD	TIGE, BARRE
ROLLED	LAMINÉ
ROUND NOSE PLIERS	PINCE RONDE
RUBBER	CAOUTCHOUC
RUSTY	ROUILLE
SAND	SABLE
SAND PAPER	PAPIER DE VERRE
SAW	SCIE
SCISSORS	CISEAUX
SCREW	VIS
SCREW DRIVER	TOURNE-VIS
SHEET IRON	TÔLE
SHELLAC	LAQUE
SHORT CIRCUIT	COURT-CIRCUIT
SLEDGE HAMMER	MASSE
SOAP	SAVON
SOCKET	DOUILLE
SOLDERING	SOUDER À L'ÉTAIN
SPACING SHIMS	CALE D'ÉPAISSEUR
SPANNER	CLEF
SPARK	ÉTINCELLE
SPINDLE	BROCHE
SPIRIT	ESSENCE
SPLASHING	BARBOTAGE
SPLIT PIN	GOUPILLE FENDUE
SPLIT WASHER	RONDELLE GROVER
SPRING	RESSORT
STAND	TORON

<u>TOOLS AND SHOP TERMS</u>	<u>OUTILLAGE ET TERMES D'ATELIER</u>
STEM	TIGE
STEEL	ACIER
STEEL PLATE	TÔLE D'ACIER
STEEL WIRE	CABLE D'ACIER
STRAIGHT PIN	GOUPILLE CYLINDRIQUE
STRAINER	CRÉPINE
TAPE	CHATERTUN
TAPER PIN	GOUPILLE CONIQUE
THREAD	FIL
THUMB SCREW	VIS À OREILLE
TIGHT	ÉTANCHE
TIN	ÉTAIN
TIN PLATE	FER BLANC ÉTAMÉ
TOOLS	OUTILS
TO BEND	FAUSSER, FLAMBER, PLIER, TORDRE
TO BORE	PERCER
TO CAST	FONDRE
TO CLAMP	CRAMPONNER
TO DISTORT	FAUSSER, TORDRE
TO FASTEN	FIXER, ATTACHER, SERRER
TO FORGE	FORGER
TO FREE UP	DÉGRIPPER
TO GREASE	GRAISSE
TO GRIND	RODER
TO GRIP	GRIPPER

TOOLS AND SHOP
TERMS

TO HOLLOW
 TO LINE UP
 TO LUBRICATE
 TO MELT
 TO PIERCE
 TO RIVET
 TO SCREW
 TO SEIZE
 TO SOLDER
 TO SPRING
 TO STAMP
 TO STRAIGHTEN
 TO STRENGTHEN
 TO SUPPLY

TO TAPER
 TO TAKE APART
 TO TIE
 TO UNSCREW
 TO WASH
 TUBE
 TUBULAR

UNIVERSAL DRIVING
 SHAFT
 USAGE

OUTILLAGE ET TERMES
D'ATELIER

EMBOUTIR
 REDRESSER, DÉTORDRE
 GRAISSEUR
 FONDRE
 PERCER
 RIVER
 VISSEUR, SERRER
 GRIPPER
 SOUDER À L'ÉTAIN
 FAUSSER, TORDRE
 ÉSTAMPER
 REDRESSER
 RENFORCER
 FOURNIR, ALIMENTER, APPROVISIONNER
 ÉFFILER
 DÉMONTER
 ATTACHER, LIER
 DÉVISSER
 LAVER
 TUBE
 TUBULAIRE

TRANSMISSION À LA
 CARDAN
 USURE

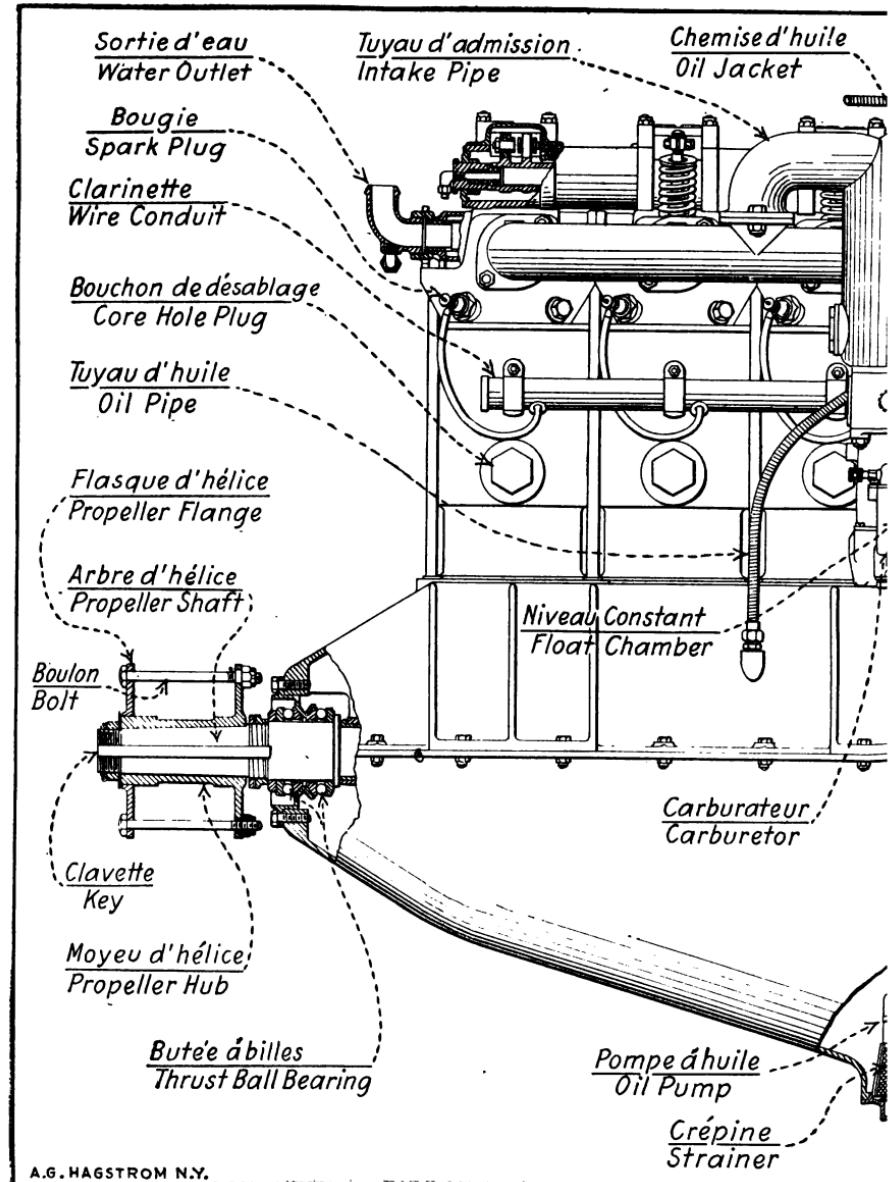
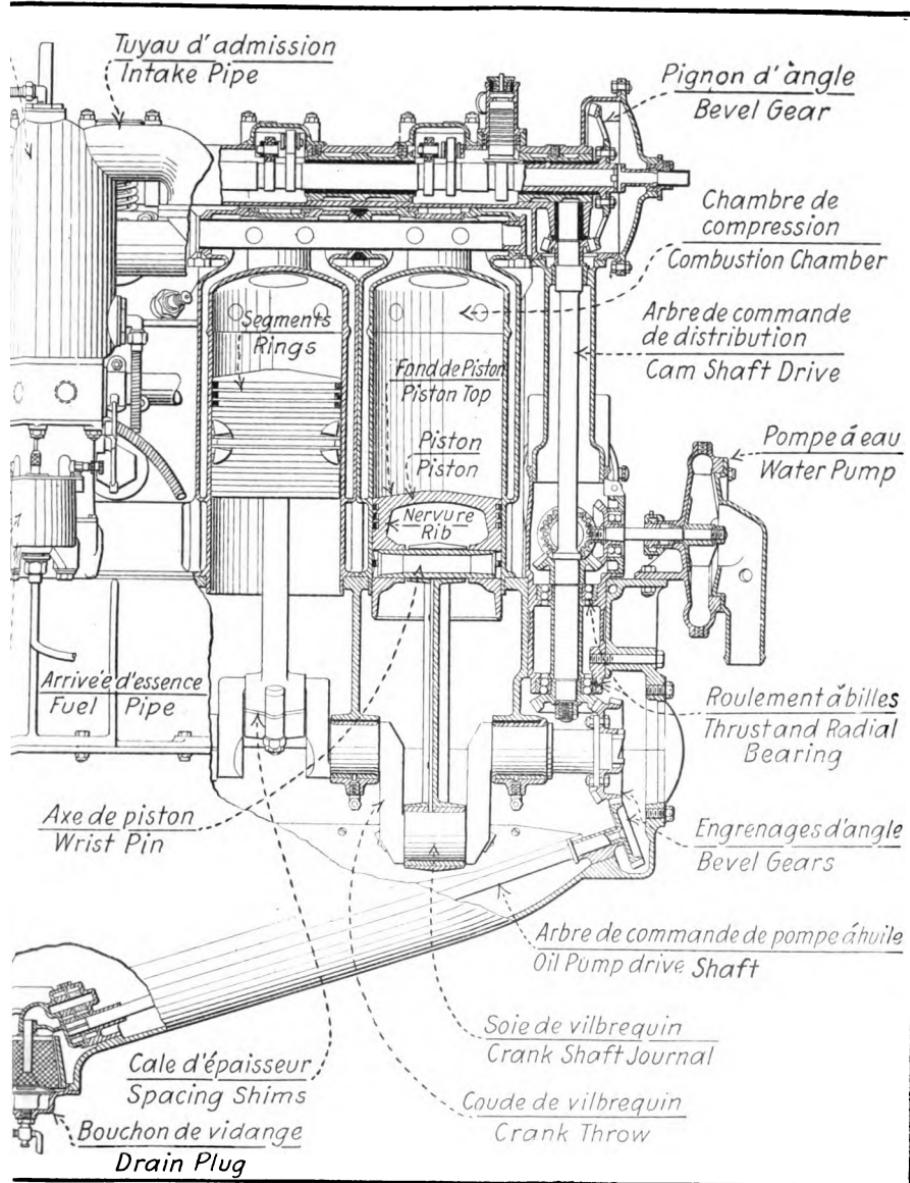


FIG. 6.—PART SECTIONAL VIEW OF SIX-CYLINDER
MOTEUR D'AVION SIX CYLINDRES HALL-SCOTT DI



HALL-SCOTT ENGINE SHOWING IMPORTANT PARTS
MIÉ COUPE, MONTRANT LES PARTIES PRINCIPALES

TOOLS AND SHOP
TERMS

VARNISH
VISE

WASHER
WASTE
WEDGE
WIRE CLOTH
WORKSHOP

ZINC

OUTILLAGE ET TERMES
D'ATELIER

VERNIS
ÉTAU

RONDELLE
ÉTOUPE
CHEVILLE
TISSU MÉTALLIQUE
ATELIER

ZINC

Metric System and English Equivalents.

The Metric System is based on the Meter which was designed to be one ten-millionth (0.000001) part of the earth's meridian, passing through Dunkirk and Formentera. Later investigations, however, have shown that the Meter exceeds one ten-millionth part by almost one part in 6400. The value of the Meter, as authorized by the U. S. Government is 39.37 inches. The Metric system was legalized by the U. S. Government in 1866.

The three principal units are the meter, the unit of length, the liter, the unit of capacity, and the gram, the unit of weight. Multiples of these are obtained by prefixing the Greek words: deka (10), hektos (100), and kilo (1000). Divisions are obtained by prefixing the Latin words: deci (1/10), centi (1/100), and milli (1/1000). Abbreviations of the multiples begin with a capital letter, and of the divisions with a small letter, as in the following tables:

Measures of Length

10 millimeters (mm.)	.....	.....	1 centimeter (cm.)	.....	.....	—.3937 in.
10 centimeters	.....	.....	1 decimeter (dm.)	.....	.....
10 decimeters	.....	.....	1 meter (m.)	.....	—3.28083 ft.	—39.37 ins.
10 meters	.....	.....	1 dekameter (Dm.)	.....	.....
10 dekameters	.....	.....	1 hektometer (Hm.)	.....	.....
10 hektometers	.....	.....	1 kilometer (Km.)	.....	.....	—0.62137 mile
1 foot	.....	.....	.....	—3048 meter	.....
1 inch	.....	.....	.....	—25.4 millimeters	.....

Measures of Surface (not Land)

100 square millimeters (mm. ²)	.....	.....	1 square centimeter (cm. ²)	— 0.155 sq. in.
100 square centimeters	.....	.....	1 square decimeter (dm. ²)	.....
100 square decimeters	.....	.....	1 square meter (m. ²)	— 10.764 sq. ft.
1 square yard	.....	.....	.....	.836 square meter
1 square foot	.....	.....	.....	.0929 square meter
1 square inch	.....	.....	.....	645.2 square millimeters

Measures of Volume

1000 cubic millimeters (mm. ³)	—1	cubic centimeter (cm. ³)	.....	— .061 cu. in.
1000 cubic centimeters	.....	—1	cubic decimeter (dm. ³)	—1 liter—61.023 cu. ins.
1000 cubic decimeters	.....	.....	—1	cubic meter (m. ³)
1 cubic yard	.....	.....	—35.314 cu. ft.	—284.2 gallons
1 cubic foot	.....	.....	.....	.7645 cubic meter
1 cubic inch	.....	.....	.....	.02832 cubic meter
		.....	.....	16.387 cubic centimeters

Measures of Capacity

10 milliliters (ml.)	.....	.....	1 centiliter (cl.)	.....
10 centiliters	.....	.....	1 deciliter (dl.)	.....
10 deciliters	.....	.....	1 liter (l.)	—1.0667 qts. (U.S.)—61.023 cu. ins.
10 liters	.....	.....	1 dekaliter (Dl.)	.....
10 dekaliters	.....	.....	1 hektoliter (Hl.)	.....
10 hektoliters	.....	.....	1 kiloliter (Kl.)	.....
1 gallon (U. S.)	.....	.....	.....	3.785 liters
1 gallon (British)	.....	.....	.....	4.543 liters

Measures of Weight

10 milligrams (mg.)	.....	.....	1 centigram (cg.)	.....
10 centigrams	.....	.....	1 decigram (dg.)	.....
10 decigrams	.....	.....	1 gram (g.)	—15.432 grains
10 grams	.....	.....	1 dekagram (Dg.)	.....
10 dekagrams	.....	.....	1 hektogram (Hg.)	.....
10 hektograms	.....	.....	1 kilogram (Kg.)	—2.2046 pounds
1000 kilograms	.....	.....	1 ton (T)	—.9842 ton of 2240 pounds

NOTE—The gram is the weight of one cubic centimeter of pure distilled water at a temperature of 30°²F.; the kilogram is the weight of 1 liter of water; the ton is the weight of 1 cubic meter of water.

1 grain	.....	.0048 gram	1 ounce (Avd.)	.....	— 28.35 grams
1 pound	=	.4536 kilograms	1 ton of 2240 pounds	=	1,016 metric tons

TIME PER MILE EXPRESSED IN MILES PER HOUR

Time for one mile Min. Sec.	Miles Per hour	Time for one mile Min. Sec.	Miles Per hour	Time for one mile Min. Sec.	Miles Per hour
0 36	100.00	1 12	50.00	1 47	33.64
0 37	97.30	1 13	49.31	1 48	33.33
0 38	94.74	1 14	48.65	1 49	33.03
0 39	92.31	1 15	48.00	1 50	32.72
0 40	90.00	1 16	47.37	1 51	32.43
0 41	87.80	1 17	46.75	1 52	32.14
0 42	85.71	1 18	46.15	1 53	31.86
0 43	83.72	1 19	45.57	1 54	31.58
0 44	81.82	1 20	45.00	1 55	31.30
0 45	80.00	1 21	44.44	1 56	31.03
0 46	78.26	1 22	43.90	1 57	30.77
0 47	76.60	1 23	43.37	1 58	30.50
0 48	75.00	1 24	42.36	1 59	30.25
0 49	73.47	1 25	42.55	2 0	30.00
0 50	72.00	1 26	41.86	2 3	29.26
0 51	70.59	1 27	41.38	2 6	28.57
0 52	69.23	1 28	40.91	2 9	27.90
0 53	67.92	1 29	40.45	2 12	27.27
0 54	66.67	1 30	40.00	2 15	26.66
0 55	65.45	1 31	39.56	2 18	26.08
0 56	64.29	1 32	39.13	2 21	25.53
0 57	63.16	1 33	38.71	2 24	25.00
0 58	62.07	1 34	38.30	2 27	24.49
0 59	61.02	1 35	37.89	2 30	24.00
1 0	60.00	1 36	37.50	2 33	23.53
1 1	59.02	1 37	37.11	2 36	23.07
1 2	58.06	1 38	36.73	2 39	22.64
1 3	57.14	1 39	36.36	2 42	22.22
1 4	56.25	1 40	36.00	2 45	21.81
1 5	55.38	1 41	35.64	2 48	21.42
1 6	54.55	1 42	35.29	2 51	21.05
1 7	53.73	1 43	34.95	2 54	20.69
1 8	52.94	1 44	34.61	3 0	20.00
1 9	52.17	1 45	34.28	..	....
1 10	51.42	1 46	33.96	..	....
1 11	50.70				

ENGLISH AND METRIC SPEED EQUIVALENTS

To obtain velocity in feet per second multiply the speed in miles per hour by 1.466+

Velocity ft. per sec. = Miles per hour \times 1.466 +

One mile per hour = 1.466 ft. per second = 88 ft. per minute = 0.447 meters per second = 26.8 metres per minute.

1 Km. per hour = 0.914 metres per second = 54.9 ft. per minute = 0.624 mi. per hour.

Table of Decimal Equivalents of Millimeters and Fractions of Millimeters

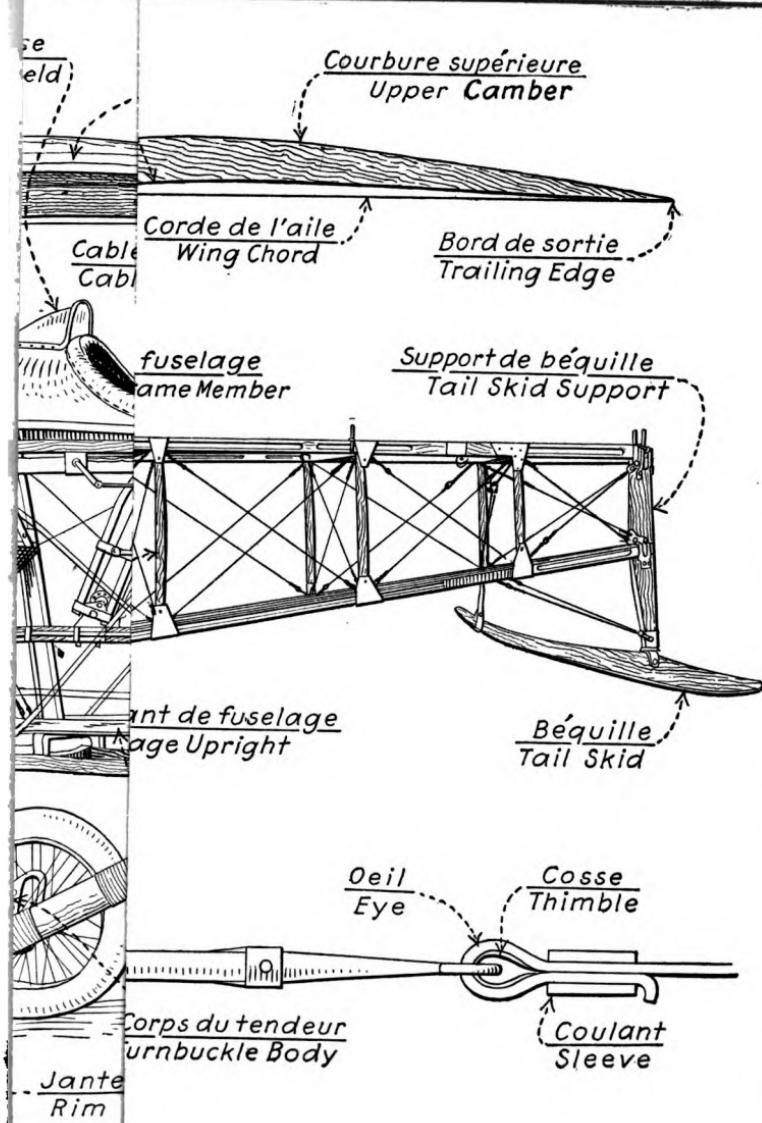
Mm.	Inches	Mm.	Inches	Mm.	Inches
$\frac{1}{10}$ = .00079		$\frac{1}{10}$ = .02047		2 =	.07874
$\frac{2}{10}$ = .00157		$\frac{2}{10}$ = .02126		3 =	.11811
$\frac{3}{10}$ = .00236		$\frac{3}{10}$ = .02205		4 =	.15748
$\frac{4}{10}$ = .00315		$\frac{4}{10}$ = .02283		5 =	.19685
$\frac{5}{10}$ = .00394		$\frac{5}{10}$ = .02362		6 =	.23622
$\frac{6}{10}$ = .00472		$\frac{6}{10}$ = .02441		7 =	.27559
$\frac{7}{10}$ = .00551		$\frac{7}{10}$ = .02520		8 =	.31496
$\frac{8}{10}$ = .00630		$\frac{8}{10}$ = .02598		9 =	.35433
$\frac{9}{10}$ = .00709		$\frac{9}{10}$ = .02677		10 =	.39370
$\frac{1}{8}$ = .00787		$\frac{1}{8}$ = .02756		11 =	.43307
$\frac{1}{7}$ = .00866		$\frac{1}{7}$ = .02835		12 =	.47244
$\frac{1}{6}$ = .00945		$\frac{1}{6}$ = .02913		13 =	.51181
$\frac{1}{5}$ = .01024		$\frac{1}{5}$ = .02992		14 =	.55118
$\frac{1}{4}$ = .01102		$\frac{1}{4}$ = .03071		15 =	.59055
$\frac{1}{3}$ = .01181		$\frac{1}{3}$ = .03150		16 =	.62992
$\frac{1}{2}$ = .01260		$\frac{1}{2}$ = .03228		17 =	.66929
$\frac{2}{3}$ = .01339		$\frac{2}{3}$ = .03307		18 =	.70866
$\frac{3}{4}$ = .01417		$\frac{3}{4}$ = .03386		19 =	.74803
$\frac{4}{5}$ = .01496		$\frac{4}{5}$ = .03465		20 =	.78740
$\frac{5}{6}$ = .01575		$\frac{5}{6}$ = .03543		21 =	.82677
$\frac{1}{100}$ = .01654		$\frac{1}{100}$ = .03622		22 =	.86614
$\frac{1}{90}$ = .01732		$\frac{1}{90}$ = .03701		23 =	.90551
$\frac{1}{80}$ = .01811		$\frac{1}{80}$ = .03780		24 =	.94488
$\frac{1}{70}$ = .01890		$\frac{1}{70}$ = .03858		25 =	.98425
$\frac{1}{60}$ = .01969		1 = .03937		26 =	1.02362

10 mm. = 1 Centimeter = 0.3937 inches.

10 cm. = 1 Decimeter = 3.937 inches.

10 dm. = 1 Meter = 39.37 inches.

25.4 mm. = 1 English inch.



A. B. HAGSTROM N.Y.

YERED AIRTON OF CONTROL MEMBERS, ETC.

FUSELAGE ETC., ETC.

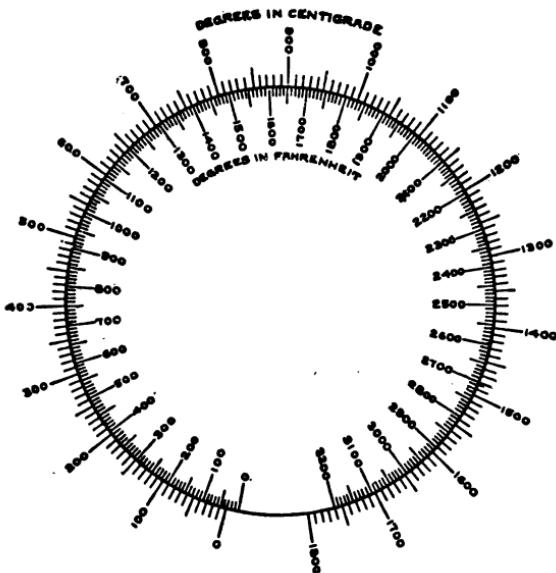


FIG. 8.—COMPARATIVE SCALE—FAHRENHEIT AND CENTIGRADE THERMOMETERS

TEMPERATURE CONVERSION FACTORS

Boiling-point of
water at sea level

Fahrenheit thermometer . . 212 degrees

Centigrade thermometer . . 100 degrees

Reaumur thermometer 80 degrees

Degrees Fahrenheit =

Degrees Centigrade =

Degrees Reaumur =

$$\frac{\text{Degrees Centigrade} \times 9}{5} + 32 = \frac{\text{Degrees Beaumur} \times 9}{4} + 32$$

$$\frac{(\text{Degrees Fahrenheit} - 32) \times 5}{9} = \frac{\text{Degrees Reaumur} \times 5}{4}$$

$$\frac{\text{Degrees Centigrade} \times 4}{5} = \frac{(\text{Degrees Fahrenheit} - 32) \times 4}{9}$$

GLOSSARY OF
AVIATION TERMS

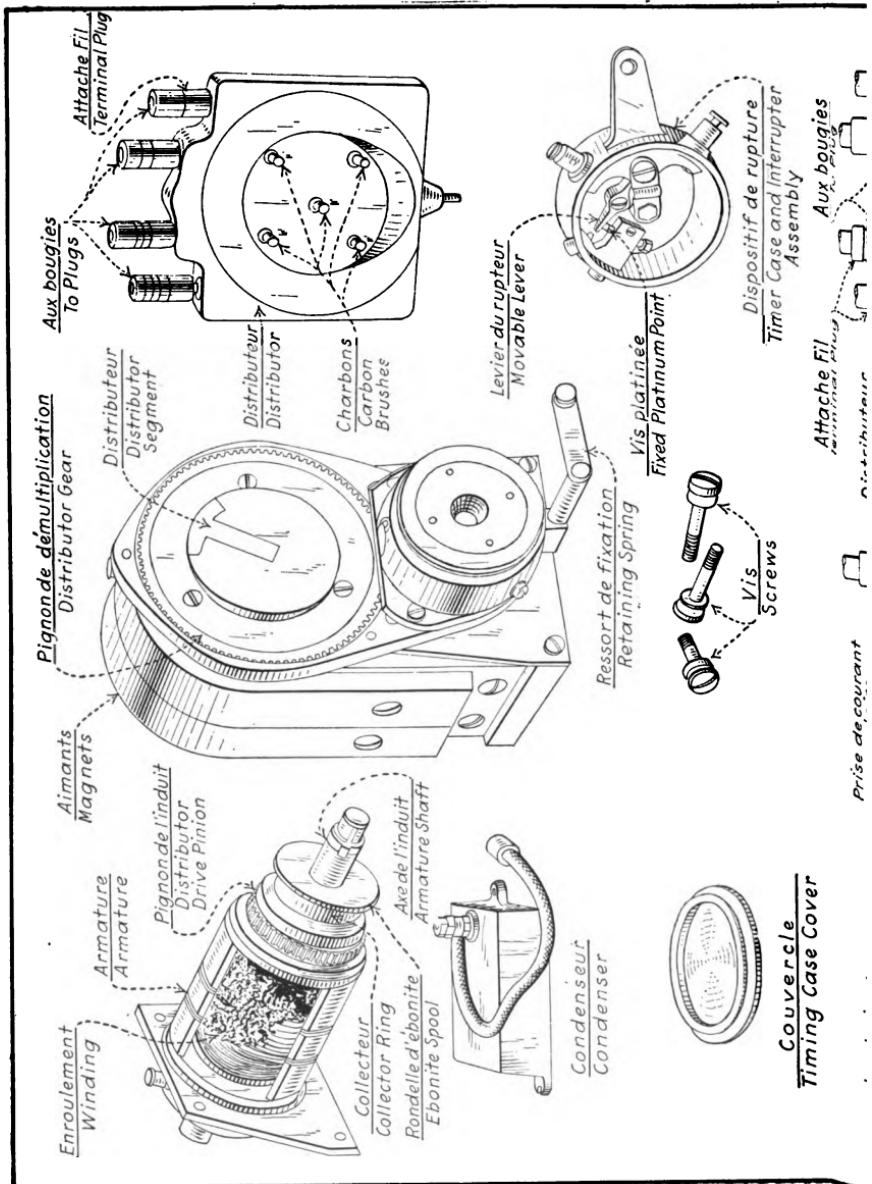
FRENCH—ENGLISH

TERMES D'AVIATION

FRANCAIS—ANGLAIS

<u>TERMES EMPLOYÉS SUR L'AERODROME</u>	<u>FLYING FIELD TERMS</u>
ACROBATIES	STUNTS
AERONAT	AIRSHIP
ALTIMÈTRE	HEIGHT INDICATOR— ALTIMETER
ALTITUDE	ALTITUDE
ANGLE D'ATTAQUE	ANGLE OF ATTACK
ANGLE D'INCIDENCE	ANGLE OF INCIDENCE
ATTERRIR	TO LAND
ATTERRISSAGE	LANDING
AVION	AIRPLANE
AVION DE CHASSE	BATTLING PLANE
AVION DE RECONNAIS- SANCE	RECONNOITERING PLANE
AVION DE BOMBARDEMENT	BOMBARDING PLANE
AVIATEUR	AVIATOR, AIRMAN
BALLON	BALLOON
BAROGRAPHE	BAROGRAPH

<u>TERMES EMPLOYÉS SUR L'AÉRODROME</u>	<u>FLYING FIELD TERMS</u>
BESSONNEAU (HANGAR) (du nom du constructeur)	CANVAS HANGAR (from the name of the maker)
BOUSSOLE	COMPASS
CABRER, CABRÉ	TO NOSE UP
CALE	CHOCK
CAPOTER	TO TURN OVER, TO SOMERSAULT
CARTE	MAP
CASQUE	HELMET
CENTRE DE GRAVITÉ	CENTER OF GRAVITY
CENTRE DE POUSSEÉ	CENTER OF THRUST
CENTRE DE PRESSION	CENTER OF PRESSURE
CHANDELLE (Comm.)	ZUHM, ZUHMING, ZOOM
CHAUSSONS FOURRÉS	FUR LINED BOOTS
CHEVAL DE BOIS (Comm.) (Tournant involontaire au sol)	CARROUSEL (MERRY-GO-ROUND) (Involuntary turning sharp on the ground)
COÉFFICIENT DE SÉCURITÉ	FACTOR OF SAFETY
COMBINAISON	UNION SUIT
COUPER L'ALLUMAGE	TO SWITCH OFF
COUCOU (Comm.)	PLANE, BUS (Comm.)
COURBURE	CAMBER
DÉCALÉS (PLANS)	STAGGERED WINGS



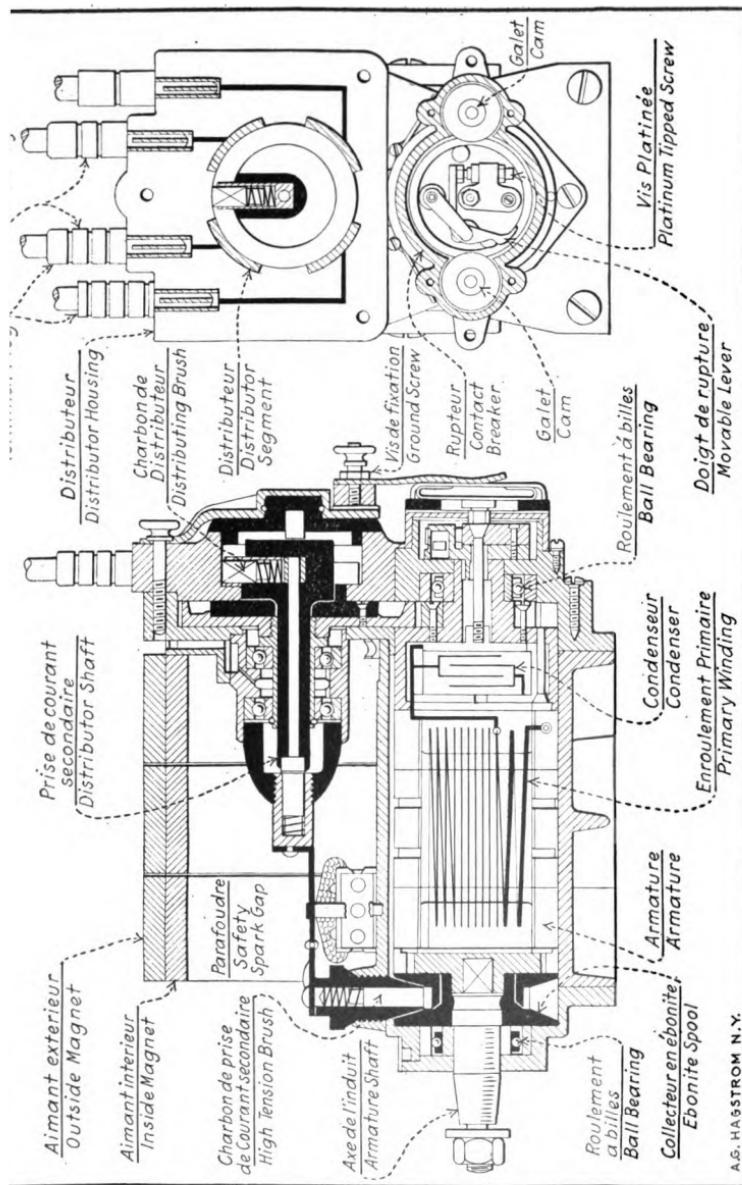


Fig. 9.—VIEWS SHOWING PRINCIPAL PARTS OF HIGH-TENSION IGNITION MAGNETOS
VUE DES PRINCIPALES PARTES D'UNE MAGNETO D'ALLUMAGE À HAUTE TENSION

A.G. HAGSTROM N.Y.

<u>TERMES EMPLOYÉS SUR L'AÉRODROME</u>	<u>FLYING FIELD TERMS</u>
DÉCOLLER	TO LEAVE THE GROUND
DÉPORTER (être déporté)	TO DRIFT (to be drifted)
DÉRAPER } DÉRIVE }	DRIFT, WINDWAY
DÉDRE	DIHEDRAL
DOUBLE COMMANDE	DUAL CONTROL
DRAP D'ATTERRIS- SAGE	LANDING SHEET
ENGIN	APPARATUS
ENVERGURE	WING SPAN
ÉQUILIBRE	BALANCE, EQUILIB- RIUM
ESCADRILLE	SQUADRON
FEU D'ATTERRISSAGE	FLARE
FEUILLE MORTE (descente en)	DEAD LEAF
FORCE ASCENSION- NELLE	LIFT
FORCE DE SUSTENTA- TION	
FORCE MOTRICE	MOTIVE POWER
GANTS FOURRÉS	FUR LINED GLOVES
GAUCHIR	TO BANK (or any action on lateral control)

<u>TERMES EMPLOYÉS SUR L'AÉRODROME</u>	<u>FLYING FIELD TERMS</u>
GAUCHISSEMENT	WING WARPING
GLISSADE SUR L'AILE	SIDE CLIP
GLISSADE SUR LA QUEUE	TAIL DIVE
HANGAR	HANGAR
HYDROAEROPLANE	{ HYDROAIRPLANE, SEAPLANE
INCIDENCE	INCIDENCE
INCIDENCE VARIABLE	CHANGEABLE ANGLE OF INCIDENCE
INCLINER	TO TILT, TO BANK
INDICATEUR DE VITESSE	SPEED INDICATOR
LIGNE DE VOL	LINE OF FLIGHT
LOOPING	LOOPING THE LOOP
LUNETTES	GOGGLES
MANCHE À VENT	WIND CONE
MARCHER EN CRABE	CRABBING
METTRE LE CONTACT	TO SWITCH ON
METTRE EN MARCHE	TO START THE ENGINE
MONTER	TO CLIMB
MOTEUR	ENGINE
NACELLE	BASKET OR CAR

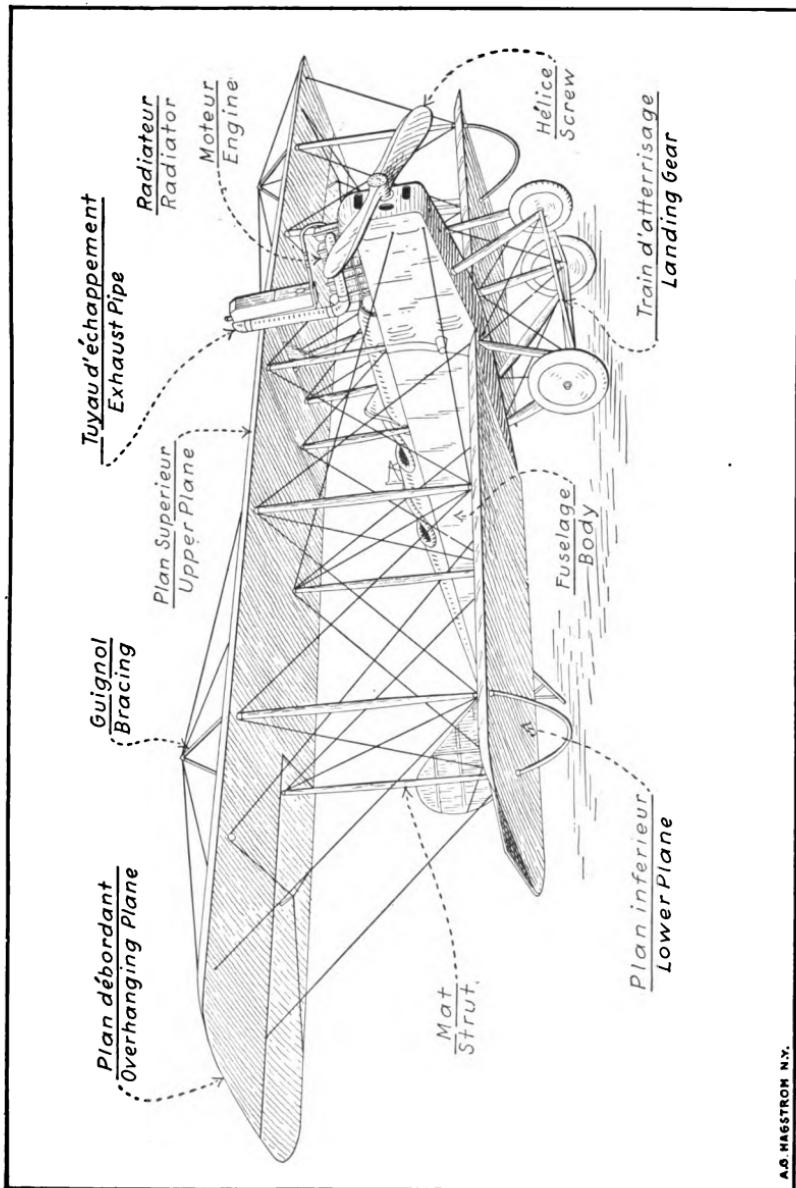


Fig. 10.—THREE-QUARTER FRONT VIEW OF TRACTOR BIPLANE
BIPLANE À HÉLICE TRACTIVE VU DE TROIS-QUARTS

<u>TERMES EMPLOYÉS SUR L'AERODROME</u>	<u>FLYING FIELD TERMS</u>
OBSERVATEUR	OBSERVER
ORIENTATION	ORIENTATION
ORIENTER (S')	To find one's position or one's way
PANNE	BREAKDOWN
PAS D'HÉLICE	PROPELLER PITCH
PENCHER	TO BANK, TO TILT
PERTE DE VITESSE (Atterrissage)	PANCAKE
PERTE DE VITESSE (en l'air)	(Landing)
PILOTE	STALL
PIQUER	PILOT
PLAFOND PLAFONNER }	TO DIVE, TO NOSE DOWN
PLANER (Volplane)	END OF CLIMB
PYLONE	GLIDE
SE METTRE EN PYLONE	PYLON
RALENTI	LANDING ON NOSE & REMAINING TAIL HIGH
RASE MOTTES (faire du)	SLOW SPEED
RÉGIME	GRASS CUTTING (flight)
	SPEED OF ROTATION

**TERMES EMPLOYÉS SUR
L'AERODROME**

RÉGLAGE	FLYING FIELD TERMS
RÉGLAGE DE L'INCIDENCE	REGULATION, ADJUSTMENT
REMOUS	WASH IN, WASH OUT
RENVERSEMENT	ROCKING
RÉSISTANCE À L'AVANCEMENT	TURN OVER ON THE WING
ROULER AU MOTEUR	DRAG
SOUFFLER (un avion)	TO TAXI
SURVOLER	PROPELLER WASH TO FLY OVER
TANGENT	LOGGY, SLUGGISH
TAXI (Comm.)	PLANE, BUS (Comm.)
TERRAIN D'ATTERRISSAGE	LANDING GROUND
TRAJECTOIRE	TRAJECTORY
VIRAGE	TURNING, VEERING
VRILLE	TAIL SPIN
ZINC (Comm.)	PLANE, BUS (Comm.)

L'AVION

AILERONS	THE PLANE
	TAIL FLAPS

<u>L'AVION</u>	<u>THE PLANE</u>
AILLES	WINGS, PLANES
ALTIMÈTRE	HEIGHT INDICATOR, ALTIMETER
ARaignée de MOTEUR	ENGINE SUPPORT
ARÉTIER ARRIERE	SPIDER
ARÉTIER AVANT	TRAILING EDGE
ATTACHE	LEADING EDGE
ATTACHE D'AILE	FASTENING
ATTACHER	WING SUPPORT
AVION	TO TIE
	AIRPLANE, PLANE
BALAI (MANCHE À)	CONTROL STICK (JOY STICK)
BAROGRAPHE	BAROGRAPH
BÉQUILLE	TAIL SKID, SPRAG
BERCEAU DE MOTEUR	ENGINE BED
BIPLACE	TWO-SEATERS
BIPLAN	BIPLANE
BLINDAGE	SHEETING
BOIS CREUX	HOLLOW WOOD
BORD D'ATTAQUE	LEADING EDGE
BORD DE SORTIE	TRAILING EDGE
BOULON	BOLT
BOURRELETS	PADDING
BOUSSOLE	COMPASS
BOWDEN	FLEXIBLE SHAFT
BRAS { Avant Arrière } D'AILE	WING SPAR { Front Back }

<u>L'AVION</u>	<u>THE PLANE</u>
CABANE	CABANE
CABLE	CABLE, STRANDED WIRE
CAPOT	HOOD, COIL
CARLINGUE	COCKPIT
CEINTURE DE SURETÉ	SAFETY BELT
CEINTURE LOOPING	SAFETY BELT WITH SUSPENDERS
CELLULE	CELLULE
CHARNIÈRE	HINGE, KNUCKLE
CHASSIS	FRAME
COMMANDES	CONTROLLING ELE- MENTS
COMMANDES À PONT	CONTROL BRIDGE (Deperdussin-Curtiss)
COMPTE TOURS	TACHOMETER
CONTACT	SWITCH
CONTRE FICHE	BRACING STRUT (Landing gear)
(Train d'atterrissage)	LAMINATED WOOD
CONTREPLAQUE	ROPE
CORDE	CHORD (Geometry)
CORDE (Geometrie)	PIANO WIRE, HARD WIRE
CORDE À PIANO	THIMBLE
COSSE	SLEEVE
COULANT	BEND, CAMBER
COURBURE	CUSHION
COUSSIN	BRACING
CROISILLON	

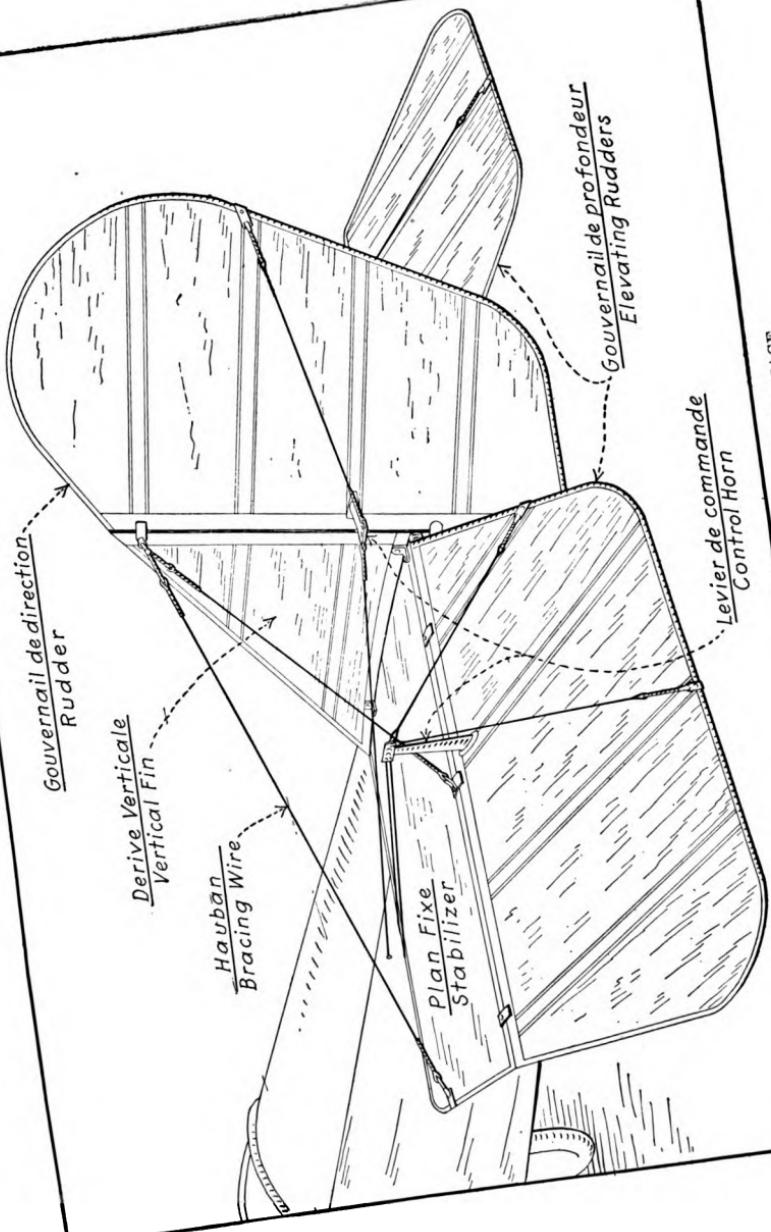


FIG. 11.—VIEW OF AIRPLANE EMPENNAGE
EMPENNAGE D'AVION

<u>L'AVION</u>	<u>THE PLANE</u>
DÉRIVE	TAIL FIN
ÉCROU	NUT
EMPENNAGE	STABILITY PLANES OF THE TAIL
ENDUIT	DOPE
ENTOILAGE	WING COVERING
ENVERGURE	WING SPAN
ESSIEU	AXLE
ETRIER	STIRRUP
EXTENSEUR	SHOCK ABSORBER
FERRURES	FITTINGS
FLASQUE D'HÉLICE	PROPELLER FLANGE
FREIN (de cable)	SAFETY WIRE
FUSÉE D'ESSIEU	AXLE SPINDLE
FUSELAGE	BODY, FUSIFORM FRAME
GLISSIÈRE	GUIDE, SLIDE
GODETS	FITTINGS
GOUVERNAIL DE DIRECTION	RUDDER
GOUVERNAIL DE PROFONDEUR	ELEVATOR
GUIGNOL	HORN, BRACING POST
HAUBAN	BRACING WIRES
HAUBANNAGE }	PROPELLER, SCREW
HÉLICE	

<u>L'AVION</u>	<u>THE PLANE</u>
HÉLICE TRACTIVE	TRACTOR SCREW
HÉLICE PROPULSIVE	PROPELLER, PUSHER SCREW
HOUSSE	COVER
JAMBE DE FORCE (Train d'atterrissage)	BRACING STRUT (Landing gear)
JANTE	RIM
LONGERON	LONGERON, LONGITUDINAL SPAR
MANCHE À BALAI	CONTROL STICK, JOY STICK
MANETTE	THROTTLE
MARCHEPIED	FOOT PAD
MAROUFLAGE	CLOTH WINDING
MAT	STRUT
MONTANT }	SINGLE SEATER
MONOPLACE	MONOPLANE
MONOPLAN	HUB
MOYEU	
NERVURES	WING RIBS
PALE D'HÉLICE	BLADE OF SCREW
PALONNIER	FOOT LEVER, RUDDER BAR
PANNEAU	SIDE PANEL
PARE BRISE	WIND SHIELD

<u>L'AVION</u>	<u>THE PLANE</u>
PATIN, PATINNAGE	SKID, RUNNER
PATIN DE GLISSIÈRE	BRONZE BEARING OF AXLE GUIDE
PÉDALE	PEDAL
PERSIENNES	LOUVRES
PIED	SUPPORTING CASTING
PLAN	PLANE, WING
PLAN CENTRAL	CENTRAL PANEL
PLAN DÉBORDANT	OVERHANG
PLAN DE DÉRIVE	STABILIZING FIN
PLAN FIXE DE QUEUE	STABILIZER
PLANCHER	FLOORING
PNEU, PNEUMATIQUE	TIRE
POIGNÉE	HANDLE
POMPE À PRESSION	PRESSURE PUMP
PORTE-CARTES	MAP-HOLDER
PORTE DE VISITE	DOOR FOR EXAMINA- TION
POULIE	PULLEY
PROFIL	FAIRING
PROFILER	TO FAIR, TO STEAM LINE
QUEUE	TAIL
RAYONS	SPOKES
RÉSERVOIR	TANK
RÉSERVOIR EN CHARGE	GRAVITY TANK

<u>L'AVION</u>	<u>THE PLANE</u>
RÉSERVOIR SOUS PRESSION	PRESSURE TANK
ROUE	WHEEL
SANDOW (Amortisseur) (Comm.)	SHOCK ABSORBER
SEMELLE DE PATIN- NAGE	SKID RUNNER
SIÈGE	SEAT
STABILISATEUR ou GOUVERNAIL DE PROFONDEUR	ELEVATOR, FLIPPERS
TENDEUR	WIRE STAY, TURN BUCKLE
TIGE DE TRANSMIS- SION	CONNECTING LINK
TIRANT	BRACING TUBES
TOILE	LINEN
TOURELLE	TURRET
TRAIN D'ATTERRIS- SAGE	LANDING GEAR
TRANSFIL	CORD WINDING
TRANSMISSION FLEX- IBLE ou BOWDEN	FLEXIBLE SHAFT (Bowden wire)
TRIPLACE	THREE-SEATERS
TRIPLAN	TRIPLANE
TUBE	TUBE
TUBE DE NIVEAU	GLASS GAUGE

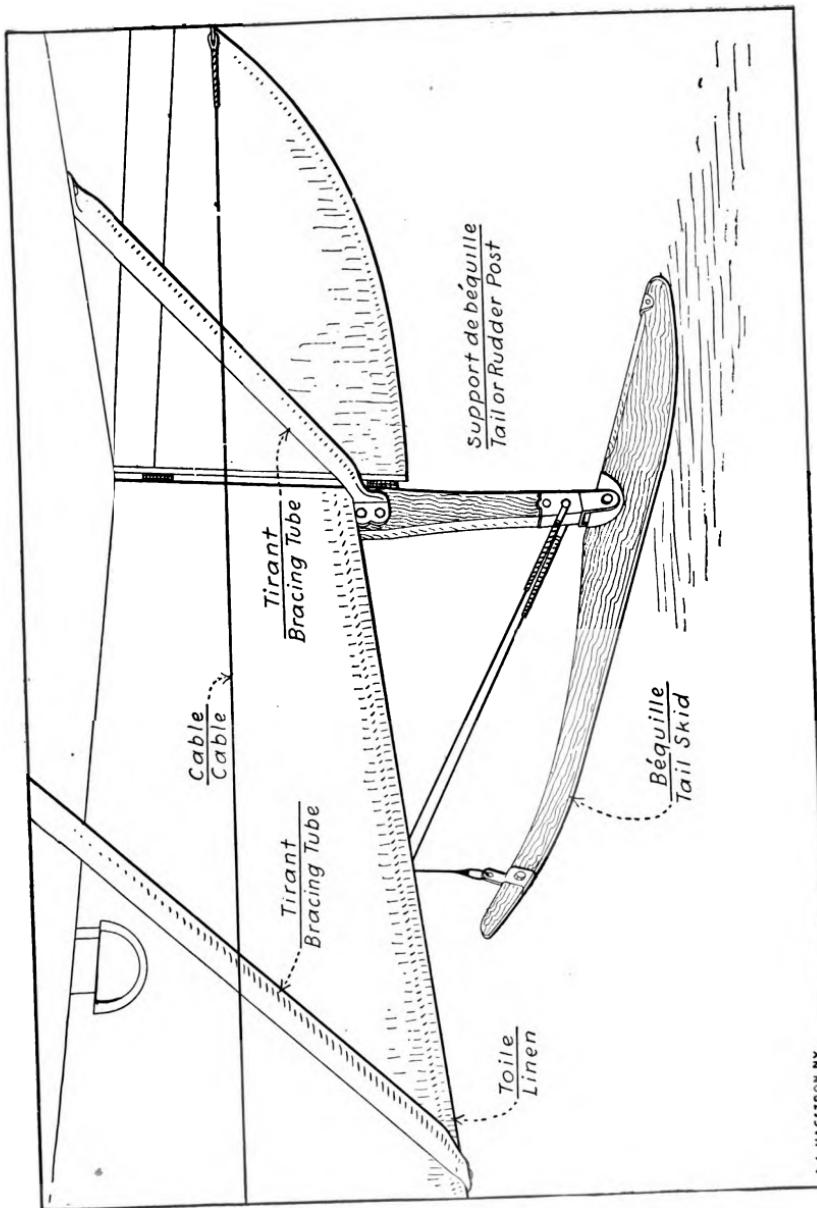


FIG. 12.—VIEW SHOWING TAIL SKID AND RUDDER POST
BÉQUILLE ET SUPPORT

L'AVION

VERNIS
VOLANT DE DIRECTION

LE MOTEUR

ACCÉLÉRER
ACCUMULATEUR
ADMISSION
AIMANT
ALIMENTATION
ALLUMAGE
ANTIFRICTION
ARAIgnée DE
MOTEUR
ARBRE
ARBRE à CAMES
ARBRE SECONDAIRE
ARRIVÉE D'ESSENCE
ASPIRATION
AVANCE à L'ALLUMAGE
AXE
AXE D'UN LEVIER
(Point d'appui)

BATTERIE
BERCEAU DE MOTEUR
BIELLE

THE PLANE

VARNISH
STEERING WHEEL

THE ENGINE

TO ACCELERATE
STORAGE BATTERY
INLET
MAGNET
FEEDING
IGNITION
BABBITT METAL
ENGINE SUPPORT
SPIDER
SHAFT
CAMSHAFT
COUNTERSHAFT
FUEL PIPE
SUCTION
ADVANCE SPARKING
AXLE, AXIS
FULCRUM
CELL
ENGINE BED
CONNECTING ROD

<u>LE MOTEUR</u>	<u>THE ENGINE</u>
BOBINE	COIL
BOUCHON DE VIDANGE	DRAIN PLUG
BOUCHON DE DES-SABLAGE	CORE HOLE PLUG
BOUGIE	SPARK PLUG
BOULON	BOLT
BOYAU (Caoutchouc)	HOSE
BUTÉE A BILLES	THRUST BEARING (BALL)
CABILLOT	TOGGLE
CAME	CAM
CARBURATEUR	CARBURETOR
CARTER	GEAR CASE, CRANK CASE
CHAINE	CHAIN
CHAMBRE DE COM- PRESSION	COMBUSTION CHAM- BER
CHATERTUN	TAPE
CHAUDIÈRE	BOILER
CHEMINÉE D'ASPIRA- TION	MIXTURE PIPE
CHEMISE D'EAU	WATER JACKÉT
CHEVAL VAPEUR (H.P.)	HORSE POWER
CLAPET	VALVE
CLARINETTE ou CONDUIT DE FILS	WIRE CONDUIT
COGNER	KNOCKING

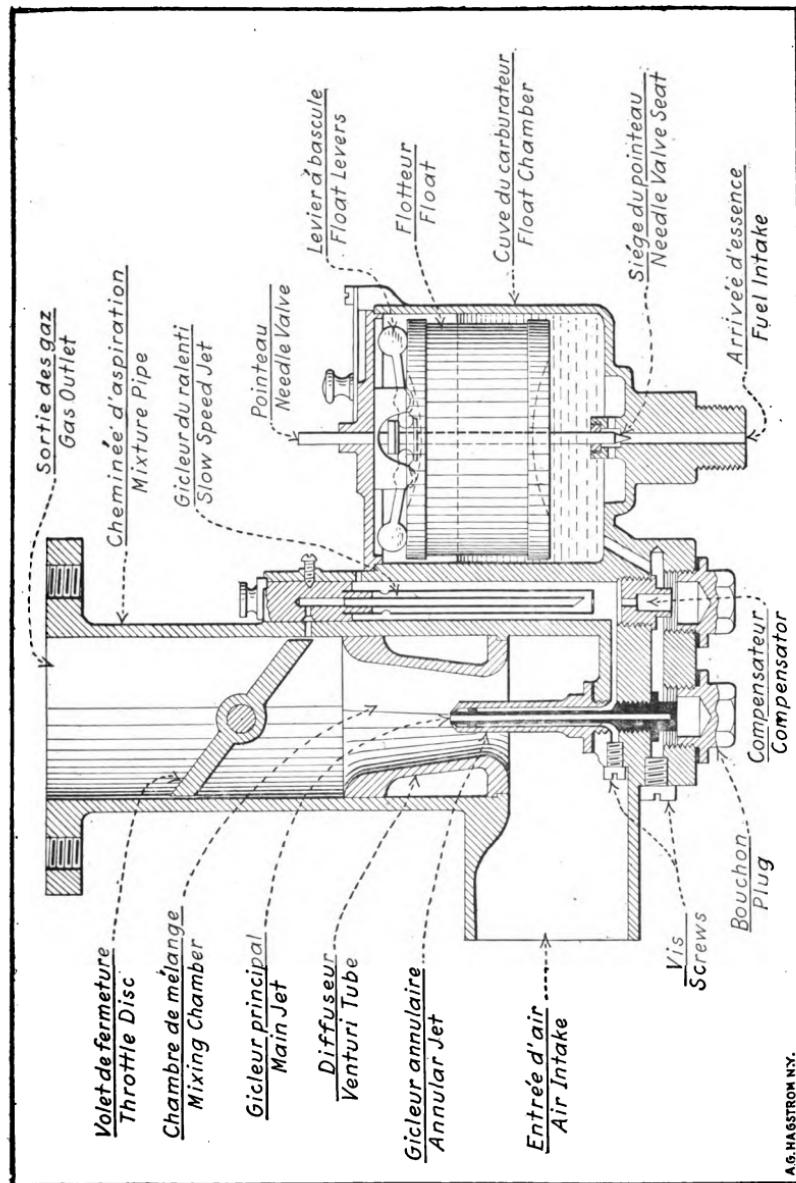


FIG. 13.—SECTIONAL VIEW OF ZENITH AIRPLANE ENGINE CARBURETOR
COUPE DU CARBURATEUR ZENITH POUR MOTEURS AVIONS

A. G. HAGSTROM N.Y.

LE MOTEUR

COLLECTEUR
D'ÉCHAPPEMENT
COMPENSATEUR
COUDE DE VILBRE-
QUIN
COUSSINET
CULASSE
CULBUTEUR
CYLINDRE

DÉMULTIPLICATEUR
DIFFUSEUR
DISPOSITIF DE
RUPTURE
DISTRIBUTEUR
DURIT

ÉCHAPPEMENT
ÉCROU
EMBRAYAGE
ENGRENNAGE

FIL DE BOUGIE
FIL DE MASSE
FREIN
FLOTTEUR

GALET

THE ENGINE

EXHAUST MANIFOLD
COMPENSATOR
CRANK THROW
BEARING BOX
CYLINDER HEAD
ROCKER
CYLINDER

REDUCTION GEARING
VENTURI TUBE
CONTACT BREAKER
DISTRIBUTOR
INDIA-RUBBER PIPE,
GASOLINE HOSE

EXHAUST
NUT
CLUTCH
GEAR

SPARK PLUG WIRE
GROUND WIRE
BRAKE
FLOAT

CAM ROLLER

<u>LE MOTEUR</u>	<u>THE ENGINE</u>
GICLEUR	INJECTOR, SPRAY NOZZLE
GOUPILLE	SPLIT PIN
GOUTTIÈRE	OIL GROOVE
GRAISSEUR	GREASE or OIL CUP
GUIDE DE SOUPAPE	VALVE GUIDE
JOINT	PACKING
MAGNETO	MAGNETO
MANCHE À AIR	AIR FEEDER
MANIVELLE	CRANK
MANOMÈTRE	PRESSURE METER
MOLETTE	ADJUSTING NUT
MOTEUR	ENGINE
NIVEAU CONSTANT	FLOAT CHAMBER
PALIER	BASE BEARING
PANNE	MISHAP, BREAKDOWN
PARAFoudRE	SAFETY GAP
PATTES D'ARaignées	OIL GROOVES (in bearing)
PIGNON	COG, PINION
PIGNON CONIQUE	BEVEL GEAR
PILE	BATTERY
PILE SÈCHE	DRY BATTERY
POINTEAU	NEEDLE VALVE
POMPE	PUMP

<u>LE MOTEUR</u>	<u>THE ENGINE</u>
POMPE D'ALIMENTA- TION	FEED-PUMP
PRESSION	PRESSURE
PRIMAIRE	PRIMARY
RADIATEUR	RADIATOR
RATÉS	MISSING
REGULATEUR	GOVERNOR
RENIFLARD	BREATHER PIPE
RÉSERVOIR	TANK
RESSORT	SPRING
RESSORT À BOUDIN	COIL SPRING
RESSORT À LAMES	LEAF SPRING
RETARD À L'ÉCHAP- PEMENT	LATE EXHAUST VALVE TIME or LAG
ROBINET DE COM- PRESSION	PETCOCK (Compression Relief)
RODER	TO GRIND
ROTATIF	ROTARY
ROULEMENT À BILLES	BALL BEARING
RUPTEUR	CONTACT BREAKER
SEGMENT	SEGMENT, PISTON RING
SIÈGE DE SOUPAPE	VALVE SEAT
SOIE DU VILBREQUIN	CRANK SHAFT JOUR- NAL
SOUPAPE	VALVE
SOUPAPE D'ADMIS- SION	INLET VALVE

<u>LE MOTEUR</u>	<u>THE ENGINE</u>
SOUPAPE D'ÉCHAPPE- MENT	EXHAUST VALVE
TIGE DE SOUPAPE TREMBLEUR	VALVE STEM COIL VIBRATOR
TUYAU TUYAU D'ARRIVÉE TUYAU D'ÉCHAPPE- MENT	PIPE INLET PIPE EXHAUST PIPE
VILBREQUIN VIS VIS DE RÉGLAGE VIS PLATINÉE	CRANKSHAFT SCREW REGULATING SCREW PLATINUM TIPPED SCREW
VOLANT VOLET (Carburateur)	FLYWHEEL THROTTLE DISK

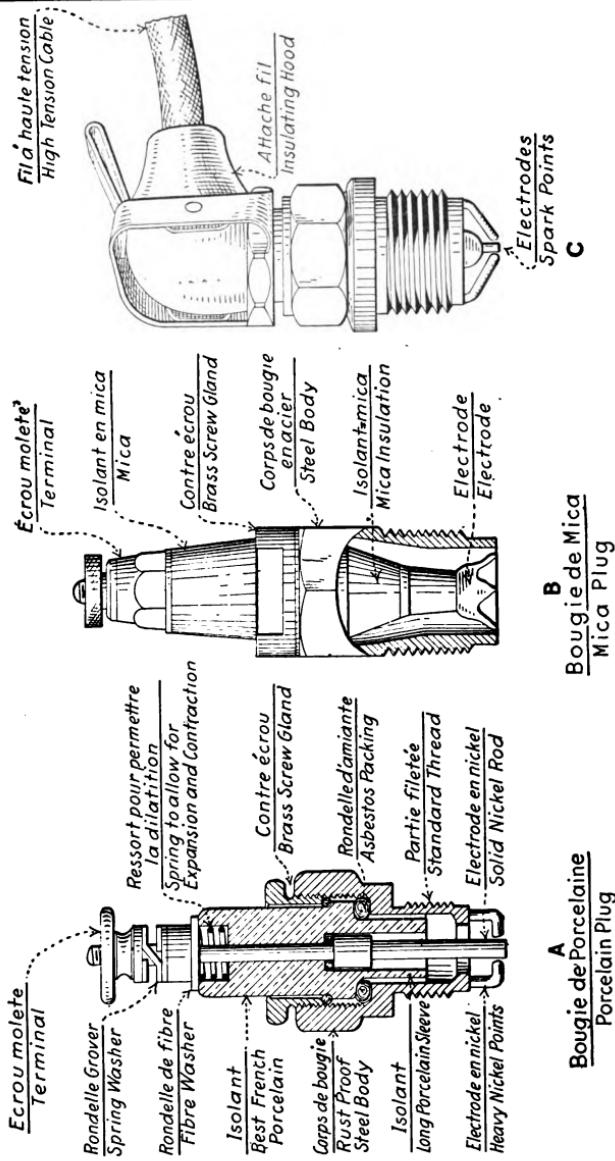
<u>OUTILLAGE ET TERMES D'ATELIER</u>	<u>TOOLS AND SHOP TERMS</u>
ACIDE	ACID
ACIER	STEEL
ACIER FONDU	CAST STEEL
ALCOOL	ALCOHOL
ALÉSAGE	BORE
ALLIAGE	ALLOY
ALUMINIUM	ALUMINUM

<u>OUTILLAGE ET TERMES</u> <u>D'ATELIER</u>	<u>TOOLS AND SHOP</u> <u>TERMS</u>
AMIANTE	ASBESTOS
AMPÈRE	AMPERE
ANNEAU	RING
ANTIFRICTION	BABBITT METAL
APPROVISIONNER	TO SUPPLY
ARMATURE	ARMATURE
ATELIER	WORKSHOP
BAGUE	RING
BAIN	BATH
BARBOTAGE	SPLASHING
BARRE	ROD
BIDON	CAN
BISEAU	BEVEL
BOUCHON	PLUG, CORK
BOULON	BOLT
BRASER	BRAZING
BRIDE	FLANGE
BROCHE	SPINDLE
BRONZE	BRONZE
BURETTE	OIL CAN
BURIN	CAPE CHISEL
CALE D'ÉPAISSEUR	SPACING SHIMS
CAOUTCHOUC	RUBBER
CARDAN	UNIVERSAL DRIVING SHAFT
CHALUMEAU	BLOW TORCH
CHAMOIS (peau de)	CHAMOIS SKIN

<u>OUTILLAGE ET TERMES</u> <u>D'ATELIER</u>	<u>TOOLS AND SHOP</u> <u>TERMS</u>
CHARBON	COAL
CHATERTUN	TAPE
CHEVILLE	WEDGE
CISEAU À FROID	CHISEL
CISEAUX	SCISSORS
CLAVETTE	KEY
CLEF	SPANNER
CLEF ANGLAISE	ADJUSTABLE
CLEF À MOLETTE	WRENCH
CLOU	NAIL
COMPAS	COMPASSES
CORNIÈRE	ANGLE IRON
COULISSE	LINK MOTION
COURSE DU PISTON	PISTON STROKE
COURT-CIRCUIT	SHORT CIRCUIT
COUVERCLE	COVER
CRAMPONNER	TO CLAMP
CRAN	NOTCH
CRÉPINE	STRAINER
CRIC	JACK
DEGRÉ	DEGREE
DÉGRIPPER	TO FREE UP
DÉMONTER	TO TAKE APART
DÉVISSEZ	TO UNSCREW
DOUILLE	SOCKET
ÉBONIT	EBONITE
ÉCROU	NUT

<u>OUTILLAGE ET TERMES</u> <u>D'ATELIER</u>	<u>TOOLS AND SHOP</u> <u>TERMS</u>
EFFILER	TO TAPER
EMAILLITE	KIND OF DOPE FOR THE PLANES
EMBOUTIR	TO HOLLOW
ENCLUME	ANVIL
ENTONNOIR	FUNNEL
ESSENCE	PETROL, SPIRIT, GASOLINE
ESTAMPER	TO STAMP
ÉTAIN	TIN
ÉTANCHE	TIGHT
ÉTAU	VICE
ÉTINCELLE	SPARK
ÉTOUPE	WASTE
FAUSSER	TO SPRING, TO DISTORT
FENTE	CRACK
FER	IRON
FER BLANC	TIN PLATE
FERRURE	IRON MOUNTING
FIL	THREAD or FINE WIRE
FIL DE FER	IRON WIRE
FIL DE CUIVRE	COPPER WIRE
FIL ELECTRIQUE	ELECTRIC WIRE
FLAMBER (se tordre)	TO BEND
FONTE	CAST IRON
FORET	HAND DRILL

<u>OUTILLAGE ET TERMES D'ATELIER</u>	<u>TOOLS AND SHOP TERMS</u>
FORGER	TO FORGE
FONDRE	TO CAST, TO MELT
FOURRURE	REINFORCING
	SLEEVE
FUITE	LEAKAGE
GALVANISÉ	GALVANIZED
GORGE	GROOVE
GOUPILLE	PIN
GOUPILLE CONIQUE	TAPER PIN
GOUPILLE	STRAIGHT PIN
CYLINDRIQUE	
GOUPILLE FENDUE	SPLIT PIN
GRAISSE	GREASE, FAT, LUBRICANT
GRAISSEUR	TO GREASE, TO LUBRICATE
GRIPPER	TO SEIZE, TO STICK, TO GRIP
HUILE	OIL
HUILE DE RICIN	CASTOR OIL
HUILE MINÉRALE	MINERAL OIL
ISOLANT	INSULATOR
JAUGE	GAUGE
JOINT	PACKING



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Fig. 14.—Typical Spark Plug Designs
TYPES DE BOUGES D'ALLUMAGE

<u>OUTILLAGE ET TERMES</u> <u>D'ATELIER</u>	<u>TOOLS AND SHOP</u> <u>TERMS</u>
LAME	BLADE
LAMINÉ	ROLLED
LAMPE À SOUDER	BLOW TORCH
LAQUE	SHELLAC
LAVER	TO WASH
LEVIER	LEVER
LIER	TO TIE
LIME	FILE
MAILLON	LINK
MANCHE	HANDLE
MANDRIN	MANDREL
MARTEAU	HAMMER
MASSE	SCALPEL
MÈCHE	BIT
MICA	MICA
NICKEL	NICKEL
NŒUD	KNOT
ORIFICE	OPENING
OUTILS	TOOLS
OUTILLAGE {	
PAPIER DE VERRE	SAND PAPER
PARAFINE	PARAFFIN
PEAU DE CHAMOIS	CHAMOIS SKIN
PÉTROLE (LAMPANT)	KEROSENE
PERCER	TO BORE, TO PIERCE

<u>OUTILLAGE ET TERMES</u> <u>D'ATELIER</u>	<u>TOOLS AND SHOP</u> <u>TERMS</u>
PIERRE A AFFUTER	OIL STONE
PINCE (LEVIER)	CROW BAR
PINCE PLATE	FLAT PLIERS
PINCE RONDE	ROUND NOSE PLIERS
PINCE COUPANTE	CUTTING PLIERS
PLATINE	PLATINUM
PLIER	TO BEND
PLOMB	LEAD
POMPE	PUMP
PONCE	PUMICE STONE
POT DE FLEURS	SPECIAL STAND FOR DISMOUNTING ROTARY ENGINE
RABOT	PLANE
RACCORD	JOINT
RACCORD GOUPILLE ET BRASÉ	PINNED AND BRAZED JOINT
RAPE	RASP
REDRESSER	TO STRAIGHTEN, TO LINE UP
REFROIDIR	TO COOL
RENFORCER	TO STRENGTHEN
RESSORT	SPRING
RIVER	TO RIVET
ROBINET	COCK
RODER	TO GRIND
RONDELLE	WASHER
RONDELLE GROVER	SPLIT WASHER

<u>OUTILLAGE ET TERMES D'ATELIER</u>	<u>TOOLS AND SHOP TERMS</u>
ROUILLE	RUSTY
RUPTURE	BREAK
SABLE	SAND
SAC	BAG
SAVON	SOAP
SCIE	SAW
SERRER	TO FASTEN, TO SCREW
SOUDURE	SOLDERING
SOUDURE AUTOGÈNE	AUTOGENOUS WELD- ING
SOUDER À L'ÉTAIN	TO SOLDER
TAMIS	STRAINER
TIGE	ROD, STEM
TIREFONDS	LAG SCREW
TISSU METALLIQUE	WIRE CLOTH
TOILE ÉMERI	EMERY CLOTH
TÔLE	SHEET IRON
TÔLE EMBOUTIE	PRESSED STEEL
TÔLE D'ACIER	STEEL PLATE
TORON	STAND
TOUR	LATHE
TOURILLON	AXLE END
TOURNEVIS	SCREW DRIVER
TUBE	TUBE
TUBULAIRE	TUBULAR
TUYAU	PIPE
TUYAUTERIE	PIPING

<u>OUTILLAGE ET TERMES</u> <u>D'ATELIER</u>	<u>TOOLS AND SHOP</u> <u>TERMS</u>
VÉRIN	JACK SCREW
VERNIS	VARNISH
VIDANGE	EMPTYING
VIS	SCREW
VIS À OREILLE	THUMB SCREW
VRILLE	GIMLET
USURE	USAGE
ZINC	ZINC

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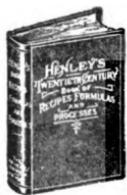
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